Screening Site Inspection
Final Report

for

Remline (a.k.a. Model Industries) Site
ILD 005 112 420
April 1997

Prepared for:
U.S. Environmental Protection Agency
Contract 68-W8-0064
Work Assignment 29-5JZZ

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1.0 Introduction

On April 16, 1993, the Alternative Remedial Contracting Strategy (ARCS) V contractor, was authorized by the U.S. Environmental Protection Agency (USEPA) Region V, to conduct a screening site inspection (SSI) of the Remline, also known as Model Industries, site in Kendall County, Illinois.

The site was initially placed on the Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) on August 27, 1990, as a result of a request for discovery action initiated by the Illinois Environmental Protection Agency (IEPA). The site received its initial comprehensive Environmental Response, Compensation, and Liability Act evaluation in the form of a preliminary assessment (PA) report completed by IEPA on September 20, 1990 (USEPA 1993). The sampling portion of the SSI was conducted on November 2, 1993, when the ARCS V contractor's field team collected six drinking water samples, and six surface soil samples.

The purposes of the SSI have been stated by the USEPA in a directive outlining pre-remedial program strategies. The directive essentially states:

> All sites will receive a SSI to 1) collect additional data beyond the PA to enable a more refined preliminary Hazard Ranking System (HRS) score, 2) to establish priorities among sites most likely to qualify for the National Priorities List (NPL), and 3) to identify the most critical data requirements for the listing expanded SI step. A SSI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as no further remedial action planned (NFRAP) or carried forward as an NPL listing candidate. A listing expanded SI will not automatically be done on these sites. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as Resource Conservation and Recovery Act (RCRA). Sites that are designated as NFRAP or deferred to other statutes are not candidates for a listing expanded SI.
>
> The listing expanded SI will address all data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred to a higher authority will receive a listing expanded SI (USEPA 1988).

USEPA Region V requested the ARCS V contractor to identify sites during the SSI that may require removal action to remediate an immediate human health and/or environmental threat.

2.0 Site Background

2.1 Introduction

This section includes information obtained during the SSI and from reports of previous activities involving this site.

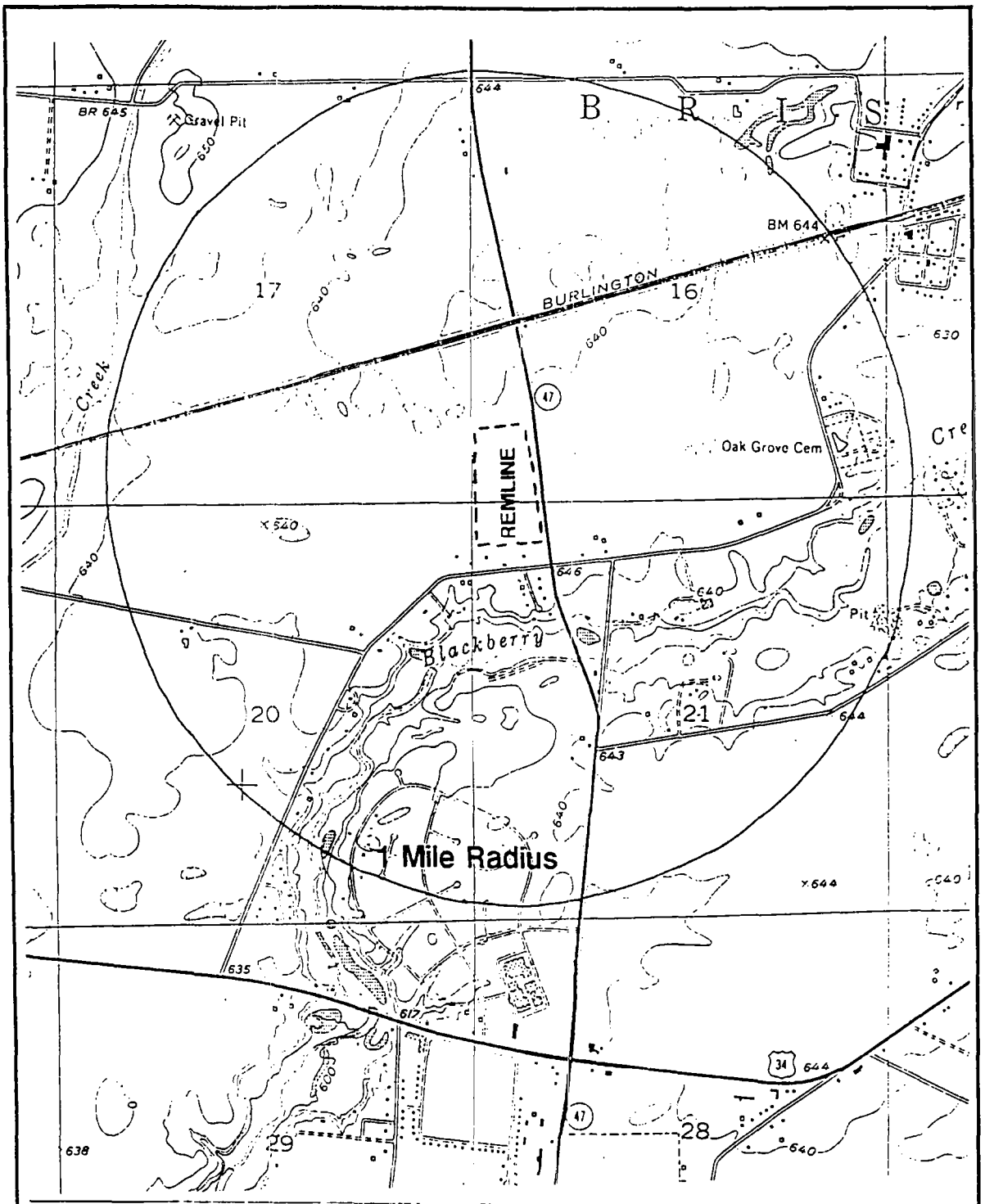
2.2 Site Description

The Remline site is located at the intersection of Route 47 and Cannonball Trail, in the northwestern quarter of Section 21, Township 37 North, Range 7 East, in Kendall County, Illinois. Figure 2-1 is a site location map; Figure 2-2 shows the site layout.

The Remline site occupies approximately twenty-three unfenced acres, the facility itself occupies about 2.3 acres onsite (James M. Olson Associates, Ltd. 1992). Remline facility contains manufacturing, warehousing and offices. The northern and western sides of the facility are used primarily for loading docks. The southern side of the facility is used for employee parking. Located in the southwestern portion of the parking lot is a small concrete pad. The concrete pad is the former drum storage location. A service/entrance drive borders the facility to the north, west, and south. Entrance and egress roads are to the south and east. Just west of the service/entrance drive along the western side of the Remline facility is the septic field and septic tank, which could not be located by casual observation.

The site is bordered on the north by farmland and on the south by farmland and Cannonball Trail Road. North and south of Cannonball Trail Road are residential homes with private wells. East of the site is Route 47 and then farmland and residential homes. West of the site is an open field and farmland. The site's topography is generally flat. The landscape includes maintained grass and tree cover. The site has no municipal water or sewer system. Storm drains convey water from the lawns (east of the building) and from the parking areas to a retention pond east of the building. The pond is used to supply the Remline facility sprinkler system with water for fire protection. Surface water runoff from Route 47 and Cannonball Trail Road drain into ditches which run along the roads.

Land within four miles of the site is used primarily for agricultural crops, livestock, and residential purposes.



Source: USGS 1973a

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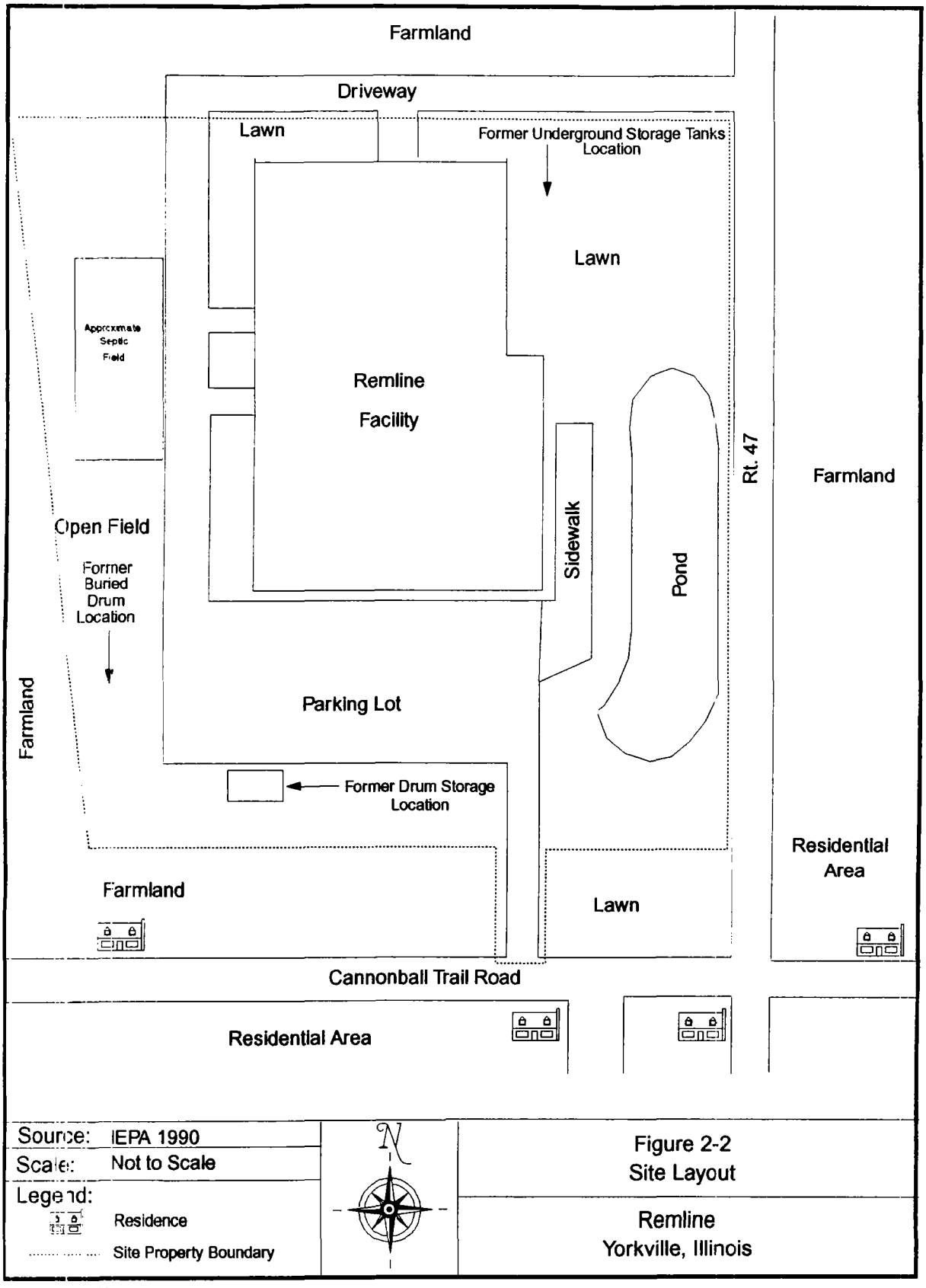
Figure 2-1
Site Location Map

Scale: 0.0 0.5 mile

Remline
Yorkville, Illinois



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2.3 Site History

2.3.1 Operational History

Remline is an active tool box manufacturing site that employs about 150 people. The property was originally farmland. During 1967 to 1972, Model Industries Corporation was located on the site. A fire in 1972 destroyed the property. In 1973, the site was purchased by AMD Industries, which in January of 1974 started manufacturing tool cabinets and boxes in the newly constructed facility. In March 1987, Lyon Metal Products bought the facility and changed the name to Remline Manufacturing. On August 26, 1992, T&D Metal Products Co. (T&D) bought the property, buildings, equipment, and all other Remline assets from Lyon Metal Products. T&D retained the Remline name.

Since the original facility was put into operation in 1967, the same type of product line has been manufactured; metal tool boxes. The process flow through the facility consists of receiving metal coils and sheets, metal stampings, forming, welding, degreasing operations, conveyors, surface coatings, and final assembly (Sun-Eco-Systems 1992).

2.3.2 Summary of Onsite Environmental Work

In 1981, buried drums were excavated at the site. The first two excavated drums were dented and leaking red paint and sludge; a third drum was found crushed and empty. Liquid in the pit contained organic solvents.

The IEPA approved a cleanup plan, and 50 drums were removed from the site by a contractor and special waste hauler (IEPA 1990). Site representatives stated the excavation took place near the southwestern corner of the parking lot.

In 1984, an anonymous complaint to the IEPA alleged that employees were pouring solvents down floor drains (IEPA 1990). The drains were connected to a septic tank and two drainage fields west of the Remline facility. The drainage fields contained discharge from the septic tank overflow. The drainage fields were about 30 inches below ground and had a total estimated area of 7,200 square feet. A sample was collected, by the IEPA, from the septic tank and showed trichloroethylene at 740,000 parts per billion (ppb). The sample results are listed in Table 2-1.

Table 2-1 IEPA Sample Results of Septic Tank	
Compound	Concentration (ppb)
Methylene chloride	2,900
1,1-dichloroethane	25
1,2-dichloroethylene	2,000
Chloroform	25
1,1,1,-trichloroethane	3,200
Bromodichloroethane	34
Tetrachloroethylene	430
Trichloroethylene	740,000
Toluene	1,200
Ethylbenzene	80
Xylenes	250
Aliphatic Hydrocarbons	1,700

During 1989, a new expanded septic field was installed south of the existing septic field. This expanded septic field was connected to the existing concrete tank under Permit 89-20151, issued by Bristol Township on December 7, 1989 (Sun-Eco-Systems 1992). The exact area of the new expanded septic field is unknown.

In 1990, the IEPA observed a drum storage area along the southern border of the parking lot (shown in Figure 2-2 as the former drum storage location). Six drums containing solvents were staged on the concrete pad that was surrounded by a fence in poor condition.

In 1991, two 10,000-gallon fuel underground storage tanks (USTs) were removed from the northeastern section of the site (shown in Figure 2-2 as the former underground storage tanks location). The tanks were 17 years old (Remline 1991).

Also in 1991, three 550-gallon xylene USTs and one 6,000-gallon paint sludge UST were removed from an adjacent location after a petroleum product spill was reported to the Illinois Emergency Services and Disaster Agency (Sun-Eco-Systems 1992). The tank excavation was conducted by the Accurate Pump and Tank Excavation Inc. under the State of Illinois Fire Marshall's office.

At present, Remline's hazardous wastes, trichloroethylene and spent paint (sludge) material, are stored in 55 gallon drums inside the facility. The hazardous wastes are shipped offsite by Safety Kleen Corporation and processed for disposal.

2.4 Applicability of Other Statutes

According to plant manager, Mr. John Hargis, the IEPA periodically monitors onsite wells; however, monitoring documentation was unavailable. The site is listed in CERCLIS for Illinois as Remline (a.k.a. Model Industries) under identification number ILD 005 112 420 (USEPA 1993). The Remline site is on the Region V list of RCRA notifiers as Model Industries, Inc., under identification number ILD 005 112 420. It is listed as a small quantity generator (USEPA 1994).

3.0 Site Inspection Activities and Analytical Results

3.1 Introduction

This section outlines procedures used and observations made during the SSI conducted at the Remline site. Sampling activities were conducted in accordance with the ARCS V contractor's quality assurance project plan (ARCS V Contractor 1991). Figure 3-1 shows onsite and offsite drinking water well sample locations. Figure 3-2 presents soil sample locations. Table 3-1 provides a summary of sample descriptions and locations. Appendix A presents a map of the area within a four-mile radius of the site and a map showing the downstream surface water route for 15-mile downstream of the site. Appendix B presents the USEPA Potential Hazardous Waste Site Inspection Report (Form 2070-13).

Samples collected for this SSI were analyzed for organic and inorganic substances contained on the USEPA target compound list (TCL) and target analyte list (TAL) by USEPA contract laboratory program participant laboratories. Appendix C presents the TCL and TAL. Appendix D presents a summary of analytical data generated by SSI sampling. Appendix E contains photographs of the site and sample locations.

3.2 Site Reconnaissance

On June 17, 1993, the ARCS V contractor conducted a reconnaissance of the Remline site. The visit included a visual site inspection to determine the status, activities, and potential health and safety hazards at the facility; to interview site representatives; and to identify potential sampling locations.

3.3 Site Representative Interview

Interviews with Remline representatives included: Mr. John Hargis, Remline plant manager; Mr. Jerry Sherman, T&D, vice-president and general manager; and Mr. Philip Molé, a consultant with Sun-Eco-Systems. In conjunction with the purchase by T&D, Sun-Eco-Systems performed Level I and II audits during 1992 that included subsurface soil sampling. Mr. Molé explained that the investigations were done as part of the Illinois Property Transfer Act.

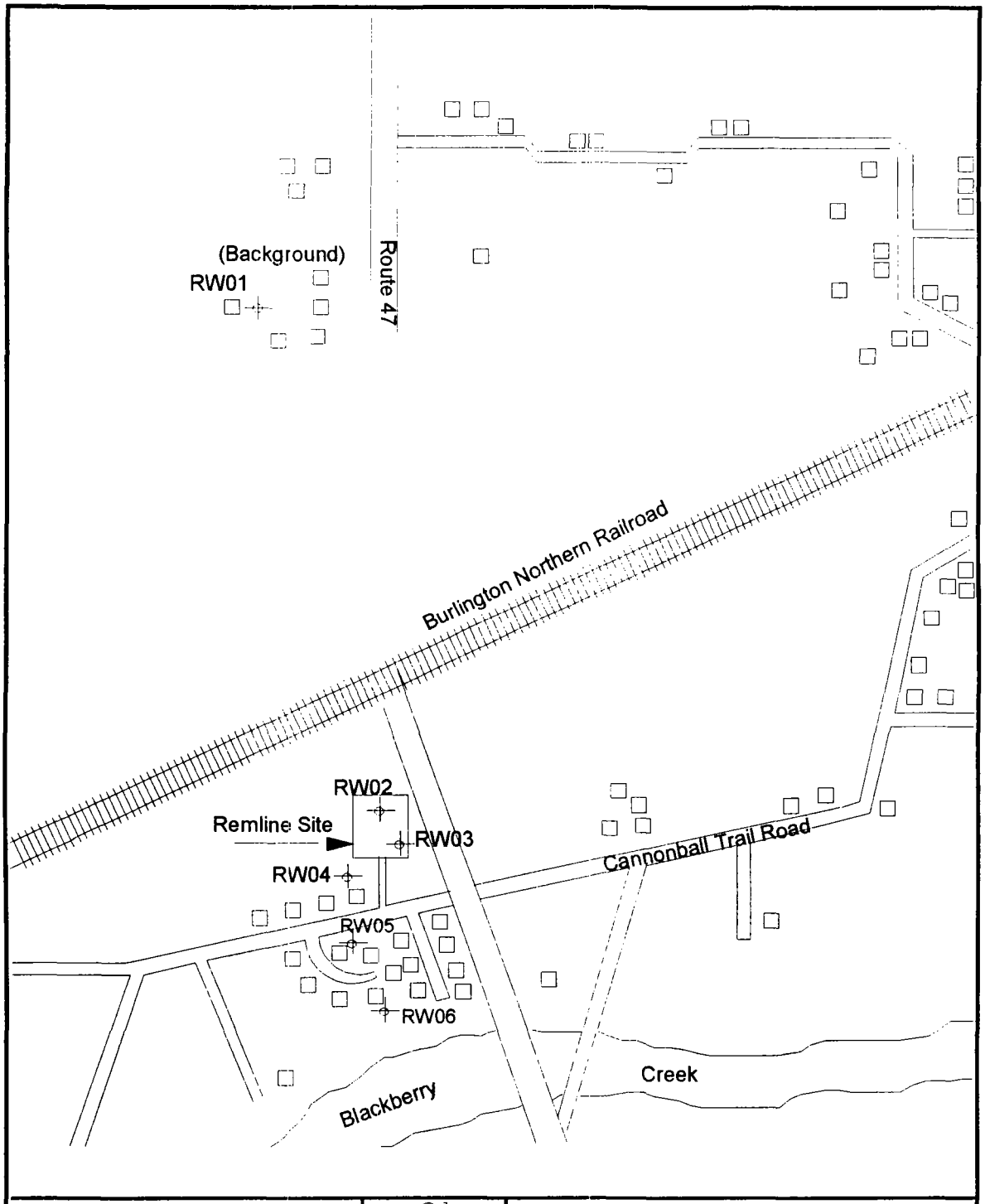

Figure 3-1
Drinking Water Sample Locations

Remline
Yorkville, Illinios

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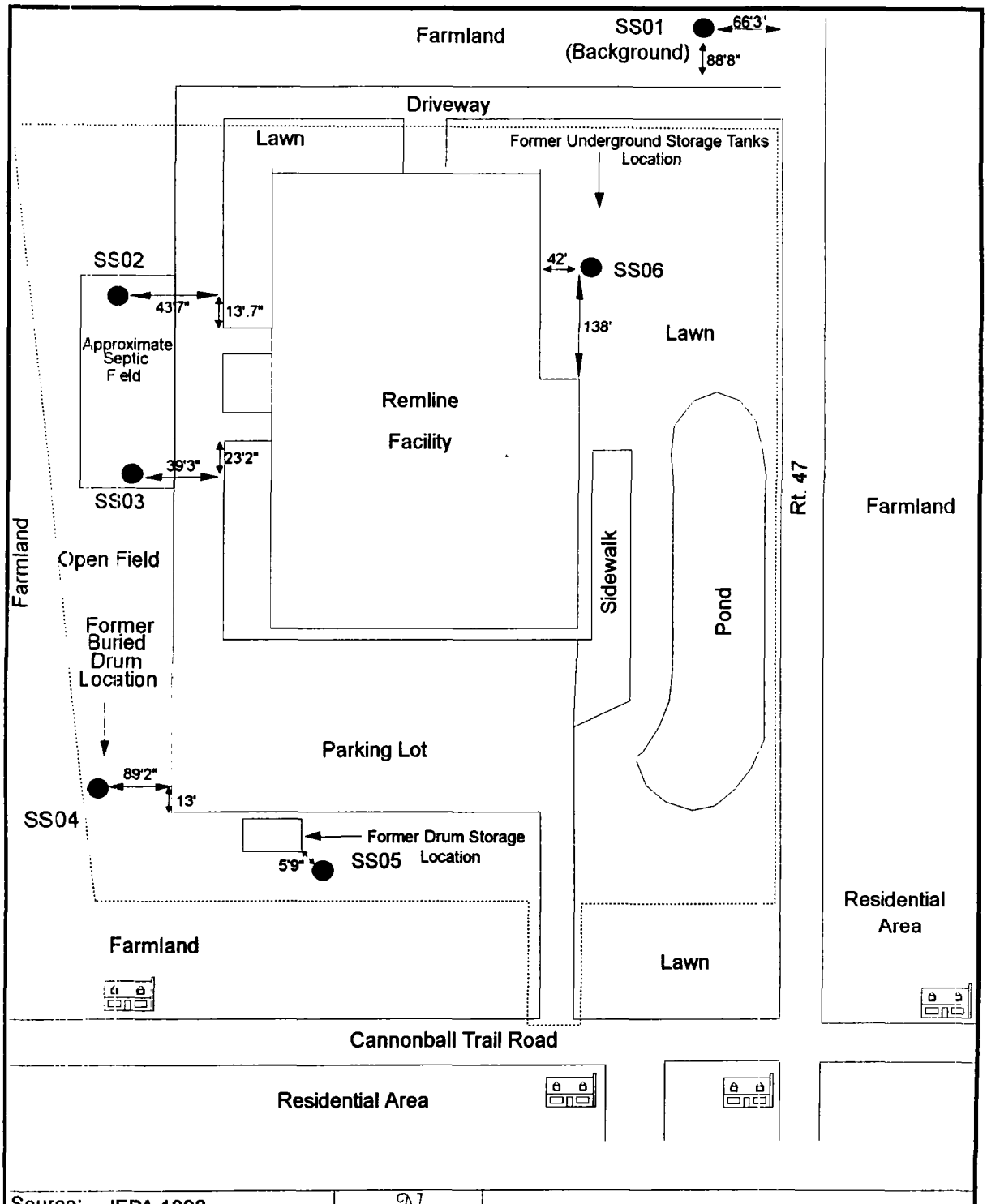

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Table 3-1
Sample Descriptions

Sample	Depth	Appearance	Location
RW01 (Background)	100'	Clear	Near Route 47 in Plano, Illinois, approximately one mile northwest of the site.
RW02	100'	Clear	Remline facility northern well, which supplies water to the facility for production and drinking as a backup well. Sample collected using a garden hose.
RW03	350'	Clear	Remline facility southern well, which supplies water to the facility for production and drinking. Sample collected from supply room, inside the facility.
RW04	232'	Clear, moderate sulfur odor	On Cannonball Trail in Plano, Illinois, approximately 1/8 mile southwest of the site.
RW05	110'	Clear, mild sulfur odor	On Amanda Lane in Plano, Illinois, approximately 1/2 mile south-southwest of the site.
RW06	12'	Clear, mild sulfur odor	On Amanda Lane in Plano, Illinois, approximately 1/2 mile south of the site.
SS01 (Background)	4-6"	Dark brown sandy clay	Southeastern corner of adjacent property, northeast of the Remline site (88'8" north of Remline entrance drive, 66'3" west of Route 47).
SS02	4-6"	Brown sandy clay	Western property of Remline site (43'7" west of service drive, 13'7" north of northern loading dock).
SS03	4-6"	Light/dark brown sandy clay	Western property of Remline site (39'9" west of service drive, 23'2" south of loading dock drive).
SS04	4-6"	Dark brown sandy clay	Southwestern corner of Remline site (89'2" west of the southwestern corner of the southern parking lot, 13' north of the southwestern corner).
SS05	4-6"	Light brown sandy gravel	Southern side of Remline site (5'9" southeast of southeastern corner of concrete pad).
SS06	4-6"	Dark brown sandy clay	Eastern side of Remline site (42' east of the facility, 138' north of the entrance/office portion of the Remline facility).

3.4 Drinking Water Samples

On November 2, 1993, the ARCS V contractor collected six drinking water samples from residential wells. Remline's environmental consultant, Sun-Eco-Systems, collected split samples. Figure 3-1 presents a sample location map; Table 3-1 summarizes sample locations and descriptions.

Drinking water sample RW01 was designated the background sample and was collected from a residential well approximately one mile northwest of the Remline site. This sample location was selected as representative of groundwater conditions in the area and is assumed upgradient.

RW02 and RW03 were collected from onsite production/drinking water wells at the Remline site. The RW02 well is located at the northern end of the site and serves as a backup well for the facility. The RW03 well is located at the southern end of the site and serves as the main well for the facility. The tap at RW02 was inaccessible, and the sample was collected using a garden hose. The water was run for more than fifteen minutes. RW03 was collected directly from a sink tap in a supply room.

Sample RW04 was collected from a residential well located approximately 1/8 mile southwest of the Remline site. A sulphur odor was noted during sample collection. RW04 is presumed to be downgradient of the Remline site.

RW05 was collected from a residential well located approximately 1/2 mile south-southwest of the site. A slight sulphur odor was noted during sample collection. RW05 is presumed to be downgradient of the Remline site.

RW06 was collected from a shallow residential well located approximately 1/2 mile south of the site. A slight sulphur odor was noted during sample collection. RW06 is presumed to be downgradient of the Remline site. Efforts to locate a background shallow well have been unsuccessful; however, nearby shallow wells promote a concern and RW06 was sampled to verify if a concern exists.

Drinking water samples scheduled for organic analysis were shipped to RCRA Environmental Inc., in Tonawanda, New York, on November 3, 1993. Drinking water samples scheduled for inorganic analysis were shipped to Chemtech Consulting Group in Englewood, New Jersey, on November 3, 1993.

3.5 Soil Samples

On November 2, 1993, six soil samples were collected from the Remline site. Each sample was collected using a dedicated stainless steel spoon and placed in a

certified clean sample jar. Sun-Eco-Systems collected split samples of all six soil samples. Figure 3-2 shows soil sample locations. Table 3-1 summarizes sample locations and descriptions.

Soil samples were labeled SS01 through SS06. Soil sample SS01 was designated as the background sample and was collected offsite, north of the Remline site, approximately 88 feet and 8 inches north of the Remline entrance drive and 66 feet and 3 inches west of Route 47. This sample location was selected as representative of soil conditions in the area.

Soil sample SS02 was collected from what is presumed to be the northern end of the septic field. The sample location was measured from the southern end of the loading dock at 13'7" north and 43'7" west.

Soil sample SS03 was collected from what is presumed to be the southern end of the septic field. The sample location was measured from the southern edge of a loading dock road at 23'2" south and 39'3" west.

Soil sample SS04 was collected from what is presumed to be the former buried drum area. The sample location was measured from the southern corner of the facility parking lot at 13' north and 89'2" west.

Soil sample SS05 was collected from near the former drum staging pad, located near the southwestern corner of the facility parking lot. The sample location was measured from the southeastern corner of the pad, at 5'9" directly southeast.

Soil sample SS06 was collected from what is presumed to be the former UST location. The sample location was measured from the corner of the Remline facility office/entrance at 138' north and from the eastern side of the Remline facility at 42' east.

Soil samples scheduled for organic analysis were shipped to American Analytical & Technical in Baton Rouge, Louisiana, on November 2, 1993. Surface soil samples scheduled for inorganic analysis were shipped to ITMO St. Louis Laboratory in Earth City, Missouri, on November 2, 1993. Samples were analyzed for TCL and TAL substances under a routine analytical services request.

3.6 Analytical Results

This section summarizes analytical results from SSI samples. Appendix D presents SSI analytical data.

Laboratory analysis of drinking water samples revealed the presence of inorganic analytes. Laboratory analysis of soil samples revealed the presence of one

volatile organic compound (VOC), semivolatile organic compounds (SVOCs), pesticides, and inorganic analytes.

3.7 Key Samples

"Key samples" are those samples that contain substances in sufficient concentration to document an observed release. Table 3-2 identifies SSI key samples.

The key drinking water samples revealed the presence of four inorganic analytes, including chromium, potassium, sodium, and zinc. The key soil samples revealed the presence of one VOC, nine SVOCs, three pesticides, and three inorganic analytes at the Remline site. The VOC is methylene chloride. The SVOCs are phenanthrene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, and indeno(1,2,3-cd)pyrene. The pesticides are 4,4'-dichlorodiphenyldichloroethylene (DDE), 4,4'-dichlorodiphenyltrichloroethane (DDT), and methoxychlor. The inorganic analytes are calcium, lead, and magnesium.

Table 3-2 Key Sample Summary				
Drinking Water (μg/L)				
Substance	Sample Location			
	RW01*	RW02	RW03	RW04
Chromium	9.0 U	-	-	13.0
Potassium	2090	-	13200	11100
Sodium	10800	-	-	42200
Zinc	31.8	102.0	112.0	-

* Background drinking water sample.

\- Compound or element is not detected at elevated levels in the key sample.

U Substance is undetected. The reported value is the contract required quantitation limit (CRQL).

Table 3-2 (Continued)
Key Sample Summary

Soil (μg/kg)						
Substance	Sample Location					
	SS01*	SS02	SS03	SS04	SS05	SS06
Methylene Chloride	26	-	-	110	-	-
Phenanthrene	410U	-	-	420	-	-
Fluoranthene	410U	-	-	1400	720	-
Pyrene	410U	-	-	1000	-	-
Benzo(a)Anthracene	410U	-	-	500	-	-
Chrysene	410U	-	-	610	-	-
Benzo(b)Fluoranthene	410U	-	-	530	-	-
Benzo(k)Fluoranthene	410U	-	-	490	-	-
Benzo(a)Pyrene	410U	-	-	480	-	-
Indeno(1,2,3-cd)Pyrene	410 U	-	-	410	-	-
4,4'-DDE	4.1 U	-	-	-	-	7.9
4,4'-DDT	4.1 U	-	-	-	-	8.5

* Background surface soil sample.

\- Compound or element is not detected at elevated levels in the key sample.

U Substance is undetected. The reported value is the CRQL.

Table 3-2 (Continued) Key Sample Summary						
Soil (μg/kg)						
Substance	Sample Location					
	SS01*	SS02	SS03	SS04	SS05	SS06
Methoxychlor	21 U	-	-	-	-	47
Calcium	16,300,000	-	-	-	121,000,000	-
Lead	28,100	234,000 JN	273,000 JN	-	-	-
Magnesium	6,090,000	-	-	22,000,000	66,500,000	-

* Background surface soil sample.

\- Compound or element is not detected at elevated levels in the key sample.

U Substance is undetected. The reported value is the CRQL.

J Reported value is estimated.

N Presumptive evidence of a compound.

4.0 Characterization of Sources

4.1 Introduction

Analysis of SSI samples led to the identification of four potential sources at the Remline site: contaminated soil at the former buried drum location, the former UST's location, the septic field, and the former drum storage location.

4.2 Contaminated Soil

4.2.1 Description

The former buried drum location is in the southwest corner of the site (Figure 2-2). Fifty buried drums containing paint and sludge, were excavated from this area. Liquid in the excavated pit contained organic solvents. An SSI soil sample revealed the presence of organic and inorganic constituents. This contaminated soil volume is approximately 66 cubic yards based on IEPA records indicating a 15 foot square hole was dug to a depth of 8 feet to remove the drums.

The former USTs location is in the northeastern section of the site along the eastern side of the Remline facility (Figure 2-2). In 1991, two 10,000-gallon fuel USTs, three 550-gallon xylene USTs, and one 6,000-gallon paint sludge UST were removed from this location. The contaminated soil volume is approximately 137 cubic yards based on the total volume of all six USTs.

The septic field is west of the Remline facility (Figure 2-2). The septic field at the time was about 30 inches below ground and had a total estimated area of 7,200 square feet. Remline employees allegedly were pouring solvents down the facility drains which were connected to the septic tank. The overflow from the septic tank goes into the septic field. IEPA sampled the septic tank and detected elevated levels of volatile compounds. The contaminated soil volume is approximately 533 cubic yards based on IEPA records indicating an estimated area of 7,200 square feet for the septic field. The thickness was assumed to be two feet.

The former drum storage location is on the southern end of the Remline parking lot (Figure 2-2). Drums containing solvents were staged on this concrete pad surrounded by a fence in poor condition. The contaminated soil volume is approximately 10 cubic yards based on the extent of the old concrete pad including the distance to the soil sample collected during the SSI containing constituents. The depth was assumed to be two feet.

4.2.2 Waste Characteristics

SSI analytical results indicate the area of affected soil contains releases of a VOC, SVOCs, pesticides, and inorganic analytes.

SSI analytical results indicate that the former buried drum location contains releases of one VOC, nine SVOCs, and one inorganic analyte. These releases include methylene chloride, phenanthrene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, ideno(1,2,3-cd)pyrene, and magnesium.

SSI analytical results indicate that the former USTs location contains pesticide releases identified as 4,4-DDE, 4,4-DDT, and methoxychlor.

SSI analytical results from the septic field reveal the presence of lead.

SSI analytical results indicate that the former drum storage location contains releases of a SVOC and inorganic analytes. These releases include fluoranthene, calcium, and magnesium.

4.2.3 Potentially Affected Migration Pathway

The soil pathway is potentially affected from the following sources, which are documented to have had a release: buried drum location, former UST location, the septic tank field, and the former drum storage pad.

The groundwater pathway may also be affected by infiltration of precipitation transporting detected compounds from surface soil to the aquifer of concern.

4.3 Other Potential Sources Within One Mile

A search of the USEPA CERCLIS and RCRA listings indicate no other potential sources are within one mile of the Remline site.

5.0 Discussion of Migration Pathways

5.1 Introduction

This section includes information useful in analyzing the potential impact of contaminants found at the Remline site on four migration pathways: groundwater, surface water, air, and soil.

5.2 Groundwater

Five drinking water wells, RW01 through RW05, screened in the dolomite aquifer were sampled during the SSI (Figure 3-1). One additional drinking water well, RW06, screened in the sand and gravel aquifer was sampled. Two wells were onsite production and drinking wells. The rest were private wells of nearby residents. Groundwater from the shallow sand and gravel aquifer is thought to flow toward Blackberry Creek. Heavy metals were detected in RW02, RW03, and RW04. RW05 and RW06, further away from the site, contained no elevated compound levels.

In the site area, unconsolidated Quaternary age deposits overlie Ordovician age bedrock [Bergstrom 1955, Illinois State Geological Survey (ISGS) 1967, ISGS 1979]. Approximately ten to eighty feet of interbedded sand, gravel, and silty clay units are present in the area [Illinois State Water Survey (ISWS) 1993, ISGS 1979]. Water bearing strata in the Quaternary age deposits are collectively called the sand and gravel aquifer.

The uppermost bedrock unit encountered below the Quaternary age deposits is the Ordovician age Maquoketa shale (ISWS 1993, ISGS 1967, Bergstrom 1955). The shale varies in approximate thickness from fifty to eighty feet (ISWS 1993). The Maquoketa shale is predominantly black to gray, soft to hard, and relatively non-water yielding. Lying directly below the Maquoketa shale is the Galena-Platteville dolomite (ISWS 1993, ISGS 1967). The Galena-Platteville dolomite is a yellow to brown, thinly bedded, fine to medium crystalline, highly fractured unit with an average thickness of about 375 feet (Foster 1956). The Ordovician age Glenwood-St. Peter sandstone underlies the Galena-Platteville dolomite. The sandstone's average thickness at and around the site is approximately 300 feet, with depths approximately 450 to 500 feet below ground surface (ISWS 1993). The dolomite aquifer and the glacial deposits are not thought to be interconnected because the Maquoketa shale acts as an impermeable boundary between the two. The dolomite and sandstone aquifers are considered interconnected (Foster 1956).

Groundwater within four miles of the site is the sole source of drinking water. Of the 679 private wells serving 1,996 people within four miles of the site, approximately two fifths draw their water from the glacial sand and gravel aquifer, two fifths draw their water from the dolomite aquifer, and approximately one fifth draw their water from the sandstone aquifer. The town of Yorkville has the only municipal wells within four miles of the site. Yorkville has two municipal wells. One is located on the northern side of the Fox River, about 1.5 miles south of the site, and serves the half of Yorkville north of the river. Yorkville's other well is on the southern side of the Fox River, approximately two miles south of the site, and serves the half of Yorkville south of the river. Table 5-1 presents municipal water supply sources within four miles of the site. Table 5-2 presents estimated populations using residential wells within four miles of the site. Residential and municipal well locations were obtained from the ISWS Private and Public-Industrial-Commercial data bases (ISWS 1993). The well locations were plotted on U.S. Geological Survey (USGS) topographic maps (USGS 1971a, b, 1973a, b). The populations associated with each well were determined using an average of 2.94 persons per household for Kendall County (U.S. Department of Commerce 1990). The population shown in Table 5-2 along with the four municipal wells, serving 4,576 persons, show an estimated total population of 6,572 people who use groundwater from wells located within four miles of the Remline site.

5.3 Surface Water

The site's surface water pathway is presumed to be toward Blackberry Creek and eventually into the Fox River. The probable point of entry is approximately one-quarter mile south of the site. Blackberry Creek comprises the zero to three mile segment of the 15 mile surface water pathway. The Fox River is approximately two miles south of the site and comprises the three to 15 mile surface water pathway. No surface water samples were collected.

Potential targets along the surface water pathway include wetlands, natural areas, and threatened/endangered plants and animals [Illinois Department of Conservation (IDC) 1994]. The Fox River Natural Area runs along the length of the

Table 5-1 Municipal Water Supply Sources Within Four Miles of Remline				
Distance/ Direction From Site	Source Name	Locations of Source	Approximate Population Served	Source Type
Onsite	Remline Facility	T37N, R7E, S21	150	Groundwater Galena-Platteville Dolomite
1.5 miles south	Yorkville, Illinois Municipal	T37N, R7E, S28	1,963	Groundwater Glenwood-St. Peter Sandstone
2.5 miles south	Yorkville, Illinois Municipal	T37N, R7E, S33	1,963	Groundwater Glenwood-St. Peter Sandstone
2 to 3 miles south	Faxon School	T37N, R6E, S24	500	Sand and Gravel

Table 5-2 Residential Well Users	
Radial Distance From Remline in Miles	Approximate Population Served By Private Wells
0 - 0.25	29
0.25 - 0.50	9
0.50 - 1.0	82
1.0 - 2.0	497
2.0 - 3.0	676
3.0 - 4.0	703
Total Population	1,996

Fox River, along the 15 mile downstream pathway. Other natural areas identified by the IDC are located on the northern side of the Fox River. These locations are approximately eleven miles downstream of the probable point of entry into the Blackberry Creek. The following endangered or threatened animals were identified to be in this area:

- Pied-billed grebe (*Podilymbus podiceps*).
- River redhorse (*Moxostoma carinatum*).
- Greater redhorse (*Moxostoma valenaennesi).*

These animals are located approximately 4.5 miles and 10.5 miles downstream of the confluence of Blackberry Creek and the Fox River.

5.4 Soil

Six soil samples were collected from the Remline site. Every sample contained at least one elevated concentration of a hazardous substance. Chemical analysis of these soil samples indicates a VOC, SVOCs, pesticides, and metals are present at concentrations significantly above background levels. The estimated volume of contaminated soil includes four sources: the former buried drum location (66 cubic yards), the former USTs location (137 cubic yards), the septic field (533 cubic yards), and the former drum storage location (10 cubic yards).

Potential targets include 150 employees at the Remline site. No engineered containment system is present to contain onsite sources. The site is unrestricted. The estimated population within one mile, including the onsite workers at Remline, is approximately 270 persons. The nearest residence is about 200 feet south of the Remline site.

5.5 Air

No documented air releases are known and none were observed during the SSI. Westerly winds are prevalent in the area. Average wind velocities are estimated at 5 to 15 miles per hour. Potential for windblown particulates could be an inhalation hazard to anyone at the site. Workers are onsite and general public access is unrestricted.

National Wetland Inventory Maps (USDI 1983a, 1983b, 1984a, 1984b) indicate an estimated 63.75 acres of wetlands are present within four miles of the site. The nearest wetland, Blackberry Creek, is located just over one quarter mile west of the site.

Sensitive environments identified within four miles of the site includes the Fox River Natural Area. Endangered or threatened plant and animal species within four miles of the site include:

- Spreading sedge *(Carex laxiculmis)*.
- Heart-leaved plantain *(Plantago cordata)*.
- Showy ladies' slipper *(Cypripedium reginae)*.
- False bugbane *(Cimicfuga racemosa)*.
- River redhorse *(Moxostoma carinatum)*.
- Greater redhorse *(Moxostoma valenaennesi)*.
- Pied-billed grebe *(Podilymbus podiceps)*.

6.0 References

Alternative Remedial Contracting Strategy (ARCS) V Contractor, 1991. Quality Assurance Project Plan for Region V Superfund Site Assessment Program, September 27.

ARCS V Contractor, 1993. Log book of observations made during reconnaissance visit, June 17.

Bergstrom, R.E., Foster, J.W., Selkregg, Lidia F., and Pryor, W.A., 1955. Groundwater Possibilities in Northeastern Illinois, Illinois State Geological Survey Circular 198.

Foster, John W., 1956. Groundwater Geology of Lee and Whiteside Counties, Illinois, Illinois State Geological Survey (ISGS), Report of Investigation 194.

James M. Olson Associated, Ltd., 1992. Land survey of Remline property, August 24.

Illinois Environmental Protection Agency (IEPA), 1990. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Preliminary Assessment report, Remline Manufacturing (ILD 005 112 420), June 4.

Illinois Department of Conservation, 1994. Correspondence to Joan V. Gonzalez, BVWST, from Susan Dees, April 7.

ISGS, 1967. Geologic Map of Illinois.

ISGS, 1979. Quaternary Deposits of Illinois, Map of Illinois.

Illinois State Water Survey, 1993. Private and PICS Databases, Kendall County, Illinois.

Remline Manufacturing, 1991. Letter from John O. Hargis to IEPA Division of Land Pollution Control, Leaking Underground Tank Section, February 6.

Sun-Eco-Systems, 1992. Environmental Review and Assessment of the Remline Company, Yorkville, Illinois, August 3.

U.S. Geological Survey (USGS), 1971a. Topographic map of Plano, Illinois, 7.5 minute quadrangle.

USGS, 1971b. Topographic map of Newark, Illinois, 7.5 minute quadrangle.

USGS, 1973a. Topographic map of Yorkville, Illinois, 7.5 minute quadrangle.

USGS, 1973b. Topographic map of Plattville, Illinois, 7.5 minute quadrangle.

U.S. Department of Interior (USDI), Illinois Department of Conservation (IDC), 1983a. National Wetlands Inventory (NWI) map, Yorkville, Illinois.

USDI, IDC, 1983b. NWI map, Plattville, Illinois.

USDI, IDC, 1984a. NWI map, Plano, Illinois.

USDI, IDC, 1984b. NWI map, Aurora South.

U.S. Environmental Protection Agency (USEPA), 1988. Pre-Remedial Strategy for Implementing Superfund Amendments and Reauthorization Act, Office of Solid Waste and Emergency Response, Washington, D.C., Directive Number 9345.2-101, February 12.

USEPA, 1993. Illinois CERCLA Information System List-8: Site/Event Listing, October 4.

USEPA, 1994. Illinois Resource Conservation and Recovery Act List, March 10.

U.S. Department of Commerce, 1990. Census of Population and Housing, Illinois.

Appendix A

Remline (a.k.a. Model Industries)

Site 4-Mile Radius Map and
15 Mile Surface Water Route Map

SDMS US EPA Region V

Imagery Insert Form

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4- MILE RADIUS MAP & 15-MILE SURFACE WATER ROUTE MAP

☐ **Other:**

Appendix B

Remline (a.k.a. Model Industries)

USEPA Form 2070-13
Site Inspection Report

Site Inspection Report

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION
01 STATE: ILD | 02 SITE NUMBER: 005 112 420

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Remline	Route 47 & Cannonball Trail

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Yorkville	IL	60560	Kendall	093	14

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
41 - 40 - 30	88 - 26 - 40	X A. PRIVATE ☐ B. FEDERAL ____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
11, 2, 93 (MONTH DAY YEAR)	X ACTIVE ☐ INACTIVE	1974 (BEGINNING YEAR) | present (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR X BVWS (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ____ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR ____ (Name of firm) ☐ G. OTHER ____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Joan Gonzalez	Civil Engineer	BVWS	312) 346-3775
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Jeff Albano	Environmental Scientist	BVWS	312) 346-3775
Bal Berena	Technician	BVWS	312) 346-3775
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
John Hargis	Plant Manager	Rt. 47 & Cannonball Trl Yorkville, IL 60560	( ) 708 553-6601
Jerry Sherman	VP/General Mgr.	601 E. Walnut St. Watseko, IL 60970	815) 432-4938
Philip Mole'	Engineer	7949 W. Country Club Lane Elmwood Park, IL 60635	(708 452-7701
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
X PERMISSION ☐ WARRANT	0850	Mild, sunny, wind at 8-10 MPH from west

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
		( )

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Jeff Albano	USEPA	BVWS	312 346-3775	05 31 94 (MONTH DAY YEAR)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE | 02 SITE NUMBER: ILD 005 112 420

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- X A. SOLID
- B. POWDER, FINES
- X C. SLUDGE
- D. OTHER (Specify)
- E. SLURRY
- X F. LIQUID
- G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

- TONS: _____
- CUBIC YARDS: _____
- NO. OF DRUMS: _____

03 WASTE CHARACTERISTICS (Check all that apply)

- X A. TOXIC
- B. CORROSIVE
- C. RADIOACTIVE
- D. PERSISTENT
- E. SOLUBLE
- F. INFECTIOUS
- G. FLAMMABLE
- H. IGNITABLE
- X I. HIGHLY VOLATILE
- J. EXPLOSIVE
- K. REACTIVE
- L. INCOMPATIBLE
- M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
(SOL)	SOLVENTS			
(PSD)	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
(IOC)	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
(MES)	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
sol	phenanthrene	85-01-1		420	ug/kg
sol	methylene chloride	75-09-2		110	ug/kg
sol	fluoranthene	206-44-0		1400	ug/kg
sol	benzo(a)anthracene	56-55-3		500	ug/kg
sol	benzo(b)fluoranthene	205-99-2		530	ug/kg
sol	benzo(k)fluoranthene	207-08-9		490	ug/kg
sol	benzo(a)pyrene	50-32-8		480	ug/kg
psd	methoxychlor	72-43-5		47	ug/kg
sol	pyrene	129-00-0		1000	ug/kg
psd	4,4'-DDE	72-54-8		7.9	ug/kg
psd	4,4'-DDT	50-29-3		8.5	ug/kg
mes	chromium	7440-47-3		13	ug/L
ioc	magnesium	7439-96-5		66500000	ug/kg
mes	lead	7439-92-1		273000	ug/kg
ioc	zinc	1314-13-2		112	ug/L

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

BWMS, 1994. Screening Site Inspection Report.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	005 112 420

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- X A. SOLID
- B. POWDER, FINES
- X C. SLUDGE
- D. OTHER _____ (Specify)
- E. SLURRY
- F. LIQUID
- G. GAS

02 WASTE QUANTITY AT SITE

(Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- X A. TOXIC
- B. CORROSIVE
- C. RADIOACTIVE
- D. PERSISTENT
- E. SOLUBLE
- F. INFECTIOUS
- G. FLAMMABLE
- H. IGNITABLE
- X I. HIGHLY VOLATILE
- J. EXPLOSIVE
- K. REACTIVE
- L. INCOMPATIBLE
- M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
(SOL)	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
sol	chrysene	218-01-9		610	ug/kg
sol	ideno(1,2,3-cd)Pyrene	193-39-5		410	ug/kg
ioc	potassium			13200	ug/L
ioc	sodium	7440-23-5		42200	ug/L
ioc	calcium			121000000	ug/kg

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: ILD | 02 SITE NUMBER: 005 112 420

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION | 02 [ ] OBSERVED (DATE: 11/2/93) | [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 6,572 | 04 NARRATIVE DESCRIPTION

Potential release to sand & gravel, Galena Platteville, Glenwood St. Peter aquifers.

01 [X] B. SURFACE WATER CONTAMINATION | 02 [ ] OBSERVED (DATE: _____) | [ ] POTENTIAL [X] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

Soil samples, collected on 11/2/93, document release to soil.

01 [ ] C. CONTAMINATION OF AIR | 02 [ ] OBSERVED (DATE: _____) | [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

None documented.

01 [ ] D. FIRE/EXPLOSIVE CONDITIONS | 02 [ ] OBSERVED (DATE: _____) | [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

None documented.

01 [ ] E. DIRECT CONTACT | 02 [ ] OBSERVED (DATE: 11/2/93) | [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 150+ | 04 NARRATIVE DESCRIPTION

Observed release to soil. Direct exposure potential to onsite employees and transient populations.

01 [X] F. CONTAMINATION OF SOIL | 02 [ ] OBSERVED (DATE: 11/2/93) | [X] POTENTIAL [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: 746 yd^3 | 04 NARRATIVE DESCRIPTION

Observed release to soil pathway.

01 [X] G. DRINKING WATER CONTAMINATION | 02 [ ] OBSERVED (DATE: 11/2/93) | [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 158 | 04 NARRATIVE DESCRIPTION

Drinking water wells RW02-RW04, serve a total of 150 persons - onsite, and 8 persons offsite.

01 [ ] H. WORKER EXPOSURE/INJURY | 02 [ ] OBSERVED (DATE: 11/2/93) | [X] POTENTIAL [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 150 | 04 NARRATIVE DESCRIPTION

Observed release to soil and drinking water.

01 [ ] I. POPULATION EXPOSURE/INJURY | 02 [ ] OBSERVED (DATE: _____) | [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

None documented.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER
ILD 005 112 420

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include names of species)

None observed.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

A small corn crop is located adjacent to the southern boundary of the site.

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Engineered containment system not present.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION

Alleged employee disposal of solvents to facility drains.

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION

An anonymous complaint to the IEPA of nightshift dumping of solvents to drains (1984). Drums buried onsite in liquid pit (1981).

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 6,572

IV. COMMENTS

Population based upon population per household per Kendall County.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

ISGS, 1967 Geologic Map of Illinois.
ISWS, 1993 Private & Pics database, Kendall County, IL.
US Dept. of Commerce, 1990, Summary of Population & Housing Characteristics
IEPA CERCLA Preliminary Assessment Report, 1991, June 4.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE: ILD | 02 SITE NUMBER: 005 112 420

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☒ A. 10^{-4} – 10^{-6} cm/sec ☐ B. 10^{-4} – 10^{-5} cm/sec ☐ C. 10^{-4} – 10^{-3} cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE (10^{-4} – 10^{-6} cm/sec) ☒ C. RELATIVELY PERMEABLE (10^{-2} – 10^{-4} cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
500+ (ft)	15 (ft)	—	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
3 (in)	3 (in)	2.5 %	south	2.5 %

09 FLOOD POTENTIAL

SITE IS IN 500 YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. 3 (mi) OTHER: B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (for endangered species)

2.5 (mi)

ENDANGERED SPECIES: 2.5

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. 2 (mi)	B. 1.5 (mi)	C. 0.125 (mi)	D. 0 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Remline site is situated among residential and agricultural land. Agricultural land is located immediately adjacent (north) of the site. Residential properties are located immediately adjacent (south) of the site. Farmland, used for livestock, is located immediately adjacent (west) of the site. Farmland and Route 47 are located immediately adjacent (east) of the site. Remline site is generally flat with pavement on all sides of the facility. A parking lot is situated on the south side. Access/Egress Roads are located on the northern lower and south side of the site.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Foster, John W., 1956. Groundwater Geology of Lee and Whiteside County, IL
Bergstrom, R.E., Foster, J.W., Selkregg, Linda F., Pryer, W.A., 1955. Groundwater Possibilities in Northwestern, IL.
USGS, Yorkville, Newark, Platteville, Plano, 1971, 73. 7.5 minute quadrang

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION
01 STATE 02 SITE NUMBER: ILD 005 112 420

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	6	RECRA Environmental Inc., Tonawada, NY ChemTech Consulting, Englewood, NJ	3/29/94
SURFACE WATER	--		
WASTE	--		
AIR	--		
RUNOFF	--		
SPILL	--		
SOIL	6	American Analytical & Technical, Baton Rouge, LA ITMO St. Louis Laboratory, Earth City, MO	3/29/94
VEGETATION	--		
OTHER	--		

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
pH	RW01: 7 RW02: 7 RW03: 6 RW04: 7 RW05: 7 RW06: 6.5
temp	RW01: 13°C RW02: 16°C RW03: 15°C RW04: 13°C RW05: 13°C RW06: 12°C

IV. PHOTOGRAPHS AND MAPS

01 TYPE [X] GROUND [ ] AERIAL
02 IN CUSTODY OF: USEPA ARCS V files

03 MAPS [X] YES [ ] NO
04 LOCATION OF MAPS: USEPA ARCS V files

V. OTHER FIELD DATA COLLECTED

VI. SOURCES OF INFORMATION

USEPA TAL/TCL analytical data, case no. 21163.
CERCLA preliminary report, IEPA, 1991, June 4.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	005 112 420

II. CURRENT OWNER(S) / PARENT COMPANY (If applicable)

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
T and D Metal Products			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS (P.O. Box, RFD #, etc.)**	**11 SIC CODE**
601 E. Walnut St., PO Box 405			
05 CITY / 06 STATE / 07 ZIP CODE		**12 CITY / 13 STATE / 14 ZIP CODE**	
Watseka / IL / 60970			
01 NAME	**02 D+B NUMBER**	**08 NAME**	**09 D+B NUMBER**
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS (P.O. Box, RFD #, etc.)**	**11 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**12 CITY / 13 STATE / 14 ZIP CODE**	
01 NAME	**02 D+B NUMBER**	**08 NAME**	**09 D+B NUMBER**
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS (P.O. Box, RFD #, etc.)**	**11 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**12 CITY / 13 STATE / 14 ZIP CODE**	
01 NAME	**02 D+B NUMBER**	**08 NAME**	**09 D+B NUMBER**
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS (P.O. Box, RFD #, etc.)**	**11 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**12 CITY / 13 STATE / 14 ZIP CODE**	

III. PREVIOUS OWNER(S) (List most recent first) / IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Lyon Metal Co.			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS (P.O. Box, RFD #, etc.)**	**04 SIC CODE**
420 N. Main			
05 CITY / 06 STATE / 07 ZIP CODE		**05 CITY / 06 STATE / 07 ZIP CODE**	
Aurora / IL / 60538			
01 NAME	**02 D+B NUMBER**	**01 NAME**	**02 D+B NUMBER**
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS (P.O. Box, RFD #, etc.)**	**04 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**05 CITY / 06 STATE / 07 ZIP CODE**	
01 NAME	**02 D+B NUMBER**	**01 NAME**	**02 D+B NUMBER**
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS (P.O. Box, RFD #, etc.)**	**04 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**05 CITY / 06 STATE / 07 ZIP CODE**	

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

IEPA CERCLA preliminary assessment report, 1990, June 4.
Environmental review and assessment, T&D Metal Company, Suneco-Systems, August 3, 1992.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	005 112 420

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE: IL | 02 SITE NUMBER: D| 005 112 420

I. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Remline	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Route 47 & Cannonball Trail	

05 CITY	06 STATE	07 ZIP CODE
Yorkville,	IL	60560

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

IEPA preliminary assessment report, 1990, June 4.
Environmental review and assessment, T&D Metal Company, Suneco-Systems, August 3, 1992.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	005 112 420

II. PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER
ILD | 005 112 420

II. PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☒ S. CAPPING/COVERING — 02 DATE unknown — 03 AGENCY unknown
04 DESCRIPTION
Removal of UST and backfill

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

IEPA CERCLA preliminary assessment report, 1990, June 4.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE: ILD | 02 SITE NUMBER: 005 112 420

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☒ D. SPILLED MATERIAL REMOVED | 02 DATE 1981 | 03 AGENCY IEPA
04 DESCRIPTION
Drum removal from southwestern corner of site.

01 ☐ E. CONTAMINATED SOIL REMOVED | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☐ F. WASTE REPACKAGED | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☒ G. WASTE DISPOSED ELSEWHERE | 02 DATE unknown | 03 AGENCY unknown
04 DESCRIPTION

01 ☒ H. ON SITE BURIAL | 02 DATE pre-1981 | 03 AGENCY Remline
04 DESCRIPTION

01 ☐ I. IN SITU CHEMICAL TREATMENT | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☐ J. IN SITU BIOLOGICAL TREATMENT | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☐ L. ENCAPSULATION | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☐ P. CUTOFF TRENCHES/SUMP | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER
ILD | 005 112 420

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

IEPA performed a drum removal in 1981.

On January 14, 1991, incident no. 910008, a petroleum spill was reported to the Illinois Emergency Services and Disaster Agency (IESDA). Spill was managed by Accurate Pump and Tank Excavating Inc. Three (500 gallon) xylene tanks and 1 (6,000 gallon) paint sludge tanks were removed.

III. SOURCES OF INFORMATION

IEPA CERCLA preliminary assessment report, 1990, June 4.
Environmental review and assessment, T&D Metal Company, Suneco-Systems, August 3, 1992.

Appendix C

Remline (a.k.a. Model Industries)

Target Compound List and Target Analyte List

Target Compound List

Volatiles

Chloromethane
Bromomethane
Vinyl Chloride
Chloroethane
Methylene Chloride
Acetone
Carbon Disulfide
1,1-Dichloroethene
1,1-Dichloroethane
1,2-Dichloroethene (total)
Chloroform
1,2-Dichloroethane
2-Butanone
1,1,1-Trichloroethane
Carbon Tetrachloride
Bromodichloromethane
1,2-Dichloropropane
Cis-1,3-Dichloropropene
Trichloroethene
Dibromochloromethane
1,1,2-Trichloroethane
Benzene
trans-1,3-Dichloropropane
Bromoform
4-Methyl-2-pentanone
2-Hexanone
Tetrachloroethene
Toluene
1,1,2,2-Tetrachloroethane
Chlorobenzene
Ethyl benzene
Styrene
Xylenes (total)

Source: Target Compound List for water and soil with low or medium levels of volatile and semi-volatile organic contaminants, as shown in the Quality Assurance Project Plan for Region V Superfund Site Assessment Program, ARCS V Contractor, September 27, 1991.

Semivolatiles

Phenol	Acenaphthene
bis(2-Chloroethyl) ether	2,4-Dinitrophenol
2-Chlorophenol	4-Nitrophenol
1,3-Dichlorobenzene	Dibenzofuran
1,4-Dichlorobenzene	2,4-Dinitrotoluene
1,2-Dichlorobenzene	Diethylphthalate
2-Methylphenol	4-Chlorphenyl-phenyl ether
2,2-oxybis-(1-Chloropropane)*	Fluroene
4-Methylphenol	4-Nitroaniline
N-Nitroso-di-n-dipropylamine	4,6-Dinitro-2-methylphenol
Hexachloroethane	N-Nitrosodiphenylamine
Nitrobenzene	4-Bromophenyl-phenyl ether
Isophorone	Hexachlorobenzene
2-Nitrophenol	Pentachlorophenol
2,4-Dimethylphenol	Phenanthrenel
bis(2-Chloroethoxy) methane	Anthracene
2,4-Dichlorophenol	Carbazole
1,2,4-Trichlorobenzene	Di-n-butylphthalate
Naphthalene	Fluoranthene
4-Chloroaniline	Pyrene
Hexachlorobutadiene	Butyl benzyl phthalate
4-Chloro-3-methylhenol	3,3-Dichlorbenzidine
2-Methylnaphthalene	Benzo(a)anthracene
Hexachlorocyclopentadiene	Chrysene
2,4,6-Trichlorophenol	bis(2-Ethylhexyl)phthalate
2,4,5-Trichlorophenol	Di-n-Octyphthalate
2-Chloronephthalene	Benzo(b)fluoranthene
2-Nitroaniline	Benzo(k)fluoranthene
Dimethylphthalate	Benzp(a)pyrene
Acenaphthylene	Indeno(1,2,3-cd)pyrene
2,6-Dinitrotoluene	Dibenzo(a,h)anthracene
3-Nitroaniline	Benzo(g,h,i)perylene

*Previously known by the name of bis(2-chlorousipropyl) ether.

Source: Target Compound List for water and soil with low or medium levels of volatile and semivolatile organic contaminants, as shown in the Quality Assurance Project Plan for Region V Superfund Site Assessment Program, ARCS V Contractor, September 27, 1991.

Target Compound List (Continued)

Pesticide/PCB

alpha-BHC	4,4-DDT
beta-BHC	Methoxychlor
delta-BHC	Endrin ketone
gamma-BHC (Lindane)	Endrin aldehyde
Heptachlor	alpha-chlordane
Aldrin	gamma-chlordane
Heptachlor epoxide	Toxaphene
Endosulfan I	Aroclor-1016
Dieldrin	Aroclor-1221
4,4-DDE	Aroclor-1232
Endrin	Aroclor-1242
Endosulfan II	Aroclor-1248
4,4-DDD	Aroclor-1254
Endosulfan sulfate	Aroclor-1260

Source: Target Compound List for water and soil containing less than high concentrations of pesticides/aroclors, as shown in the Quality Assurance Project Plan for Region V Superfund Site Assessment Program, ARCS V Contractor, September 27, 1991.

Target Analyte List

Aluminum	Magnesium
Antimony	Manganese
Arsenic	Mercury
Barium	Nickel
Beryllium	Potassium
Cadmium	Selenium
Calcium	Silver
Chromium	Sodium
Cobalt	Thallium
Copper	Vanadium
Iron	Zinc
Lead	Cyanide

Source: Target Analyte List in the Quality Assurance Project Plan for Region V Superfund Site Assessment Program, ARCS V Contractor, September 27, 1991.

Appendix D
Remline (a.k.a. Model Industries)
Analytical Results

Contents

Data Reporting Qualifiers
Definitions for Organic Chemical Data Qualifiers

R - Indicates that the data are unusable. The compound may or may not be present.

U - Indicates compound was analyzed for but not detected. The associated numerical value is the sample quantitation limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for TICs where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, the N code is not used.

P - This flag is used for a pesticide Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported and flagged with a "P".

C - This flag applies to results where identification has been confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination. This flag must be used for a TIC as well as for a positively identified TCL compound

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for the specific analysis. This flag will not apply to pesticide/PCBs analyzed by GC/MS methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - Other specific flags may be required to properly define the results. The "X" flags are fully described on the data tables.

Data Reporting Qualifiers
Definitions for Inorganic Chemical Data Qualifiers

R - Indicates that the data are unusable. The compound may or may not be present.

U - Indicates compound was analyzed for but not detected. The associated numerical value is the sample quantitation limit.

J - Indicates an estimated value.

B - Indicates that the reported value is less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).

E - The reported value is estimated because of the presence of interference.

M - Duplicate injection precision criteria not met.

N - Spiked sample recovery not within control limits.

S - The reported value was determined by the Method of Standard Additions (MSA).

W - Post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.

* - Duplicate analysis was not within control limits.

+ - Correlation coefficient for the MSA was less than 0.995.

Volatile Organic Analysis for Drinking Water Samples
Remline (aka Model Industries)

Volatile Compound	Sample Location Concentrations in ug/L					
	RW01 Background	RW02	RW03	RW04	RW05	RW06 **
Chloromethane	0.2 J	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	150 D	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U	2 U	2 U	2 U
Acetone	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Disulfide	1 U	1 U	1 U	1 U	0.5 J	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	0.2 J	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	20	1 U	1 U	1	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	0.1 J	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	0.4 J	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-Pentanone	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropan	1 U	1 U	1 U	1 U	1 U	1 U
Total Number of TICS *	0	0	0	0	0	0

* Number, not concentrations, of tentatively identified compounds (TICs).

** Shallow residential well screened in the upper aquifer.
Efforts to locate a background sample well were unsuccessful.

rw-volat

Semivolatile Organic Analysis for Drinking Water Samples Remline (aka Model Industries)						
Semivolatile Compound	Sample Location Concentrations in ug/L					
	RW01 Background	RW02	RW03	RW04	RW05	RW06**
Phenol	5 U	5 U	5 U	5 U	5 U	5 U
bis(2-Chloroethyl)Ether	5 U	5 U	5 U	5 U	5 U	5 U
2-Chlorophenol	5 U	5 U	5 U	5 U	5 U	5 U
2-Methylphenol	5 U	5 U	5 U	5 U	5 U	5 U
2,2'-oxybis(1-Chloropropane)	5 U	5 U	5 U	5 U	5 U	5 U
4-Methylphenol	5 U	5 U	5 U	5 U	5 U	5 U
n-Nitroso-Di-n-Propylamine	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	5 U	5 U	5 U	5 U	5 U	5 U
Nitrobenzene	5 U	5 U	5 U	5 U	5 U	5 U
Isophorone	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitrophenol	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dimethylphenol	5 U	5 U	5 U	5 U	5 U	5 U
bis(2-Chloroethoxy)Methane	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dichlorophenol	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene	5 U	5 U	5 U	5 U	5 U	5 U
4-Chloroaniline	5 U	5 U	5 U	5 U	5 U	5 U
Hexachlorobutadiene	5 U	5 U	5 U	5 U	5 U	5 U
4-Chloro-3-Methylphenol	5 U	5 U	5 U	5 U	5 U	5 U
2-Methylnaphthalene	5 U	5 U	5 U	5 U	5 U	5 U
Hexachlorocyclopentadiene	5 U	5 U	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	5 U	5 U	5 U	5 U	5 U	5 U
2,4,5-Trichlorophenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Chloronaphthalene	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitroaniline	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	5 U	5 U	5 U	5 U	5 U	5 U
Acenaphthylene	5 U	5 U	5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline	20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthene	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrophenol	20 U	20 U	20 U	20 U	20 U	20 U
4-Nitrophenol	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U	5 U
Diethylphthalate	5 U	5 U	5 U	5 U	5 U	5 U
4-Chlorophenyl-phenylether	5 U	5 U	5 U	5 U	5 U	5 U
Fluorene	5 U	5 U	5 U	5 U	5 U	5 U
4-Nitroaniline	20 U	20 U	20 U	20 U	20 U	20 U
4,6-Dinitro-2-Methylphenol	20 U	20 U	20 U	20 U	20 U	20 U

Semivolatile Organic Analysis for Drinking Water Samples (Continued)
Remline (aka Model Industries)

Semivolatile Compound	Sample Location Concentrations in ug/L					
	RW01 Background	RW02	RW03	RW04	RW05	RW06
n-Nitrosodiphenylamine	5 U	5 U	5 U	5 U	5 U	5 U
4-Bromophenyl-phenylether	5 U	5 U	5 U	5 U	5 U	5 U
Hexachlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U
Pentachlorophenol	20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene	5 U	5 U	5 U	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U	5 U	5 U	5 U
di-n-Butylphthalate	5 U	5 U	5 U	5 U	5 U	5 U
Fluoranthene	5 U	5 U	5 U	5 U	5 U	5 U
Pyrene	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	0.4 J	5 U	5 U	5 U	5 U	5 U
3,3'-Dichlorobenzidine	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)Anthracene	5 U	5 U	5 U	5 U	5 U	5 U
Chrysene	5 U	5 U	5 U	5 U	5 U	5 U
bis(2-Ethylhexyl)Phthalate	0.3 J	5 U	5 U	5 U	5 U	5 U
di-n-Octyl Phthalate	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(b)Fluoranthene	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(k)Fluoranthene	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)Pyrene	5 U	5 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)Pyrene	5 U	5 U	5 U	5 U	5 U	5 U
Dibenzo(a,h)Anthracene	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(g,h,i)Perylene	5 U	5 U	5 U	5 U	5 U	5 U
Total Number of TICs *	3	1	2	1	1	0

* Number, not concentration, of tentatively identified compounds (TICs).

** Shallow residential well screened in the upper aquifer.

Efforts to locate a background sample well were unsuccessful.

rw-semiv

Pesticide/PCB Analysis for Drinking Water Samples
Remline (aka Model Industries)

Pesticide/ PCB	Sample Location Concentrations in ug/L					
	RW01 Background	RW02	RW03	RW04	RW05	RW06*
Alpha-BHC	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U
Beta-BHC	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U
Delta-BHC	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U
Gamma-BHC (Lindane)	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U
Heptachlor	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U
Aldrin	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U
Heptachlor Epoxide	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U
Endolsulfan I	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U
Dieldrin	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U
4,4'-DDE	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U
Endrin	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U
Endosulfan II	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U
4,4'-DDD	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U
Endosulfan Sulfate	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U
4,4'-DDT	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U
Methoxychlor	0.10 U	0.10 U	0.10 UJ	0.10 U	0.10 U	0.10 U
Endrin Ketone	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U
Endrin Aldehyde	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U
Alpha-Chlordane	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U
Gamma-Chlordane	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U
Toxaphene	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Aroclor-1016	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1268	0.40 U	0.40 U	0.40 UJ	0.40 U	0.40 U	0.40 U
Aroclor-1232	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1242	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1248	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1254	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1260	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U

rwpest

* Shallow residential well screened in the upper aquifer.
Efforts to locate a background sample well were unsuccessful.

Inorganic Analysis for Drinking Water Samples
Remline (aka Model Industries)

Metals and Cyanide	Sample Location Concentrations in ug/L					
	RW01 Background	RW02	RW03	RW04	RW05	RW06
Aluminum	44.0 U	44.0 U	44.0 U	44.0 U	44.0 U	44.0 U
Antimony	28.0 RU	28.0 RU	28.0 RU	28.0 RU	28.0 RU	28.0 RU
Arsenic	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Barium	118	120	91.8	51.6	71.2	72.2
Beryllium	1.0 U	1.0 U	1.8 UB	1.8 UB	1.0 U	1.1 UB
Cadmium	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	95900	99300	56700	51200	69200	68800
Chromium	9.0 U	9.0 U	9.0 U	13.0	9.0 U	9.0 U
Cobalt	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
Copper	42.6 U	8.0 UJ	11.6 U	8.0 UJ	11.6 U	9.0 UB
Iron	5030	2930	118	162	342	214
Lead	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Magnesium	41700	45300	24200	26000	34000	33600
Manganese	61.3	89.4	3.5 B	7.0 B	12.3	7.0 B
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	6.0 RU	16.4 RB	6.0 RU	8.9 RB	6.0 RU	6.0 RU
Potassium	2090	2880	13200	11100	3820	4320
Selenium	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Silver	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	10800	15400	27700	42200	8480	7900
Thallium	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vanadium	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
Zinc	31.8	102.0	112.0	47.8	6.0 U	6.0 U
Cyanide	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U

rwmetals

Semivolatile Organic Analysis for Drinking Water Samples
Tentatively Identified Compounds
Remline (aka Model Industries)

Compound Name	Retention Time	Estimated Concentration (ug/L)	
Sample RW01 (Background)			
Cyclohexenol Isomer	6.47	11	J
Unknown	8.79	12	J
2-Chlorocyclohexanol	9.82	81	JN
Sample RW02			
Cyclohexenol Isomer	6.47	10	J
Sample RW03			
Cyclohexenol Isomer	6.48	21	J
2-Cyclohexen-1-One	7.47	12	JN
Sample RW04			
Sulfur, Mol. (S8)	26.84	32	JN
Sample RW05			
Cyclohexenol Isomer	6.47	12	J

tic-vol

Volatile Organic Analysis for Soil Samples
Remline (aka Model Industries)

Volatile Compound	Sample Location Concentrations in ug/kg					
	SS01 Background	SS02	SS03	SS04	SS05	SS06
Chloromethane	12 U	12 U	12 U	12 U	11 U	12 U
Bromomethane	12 U	12 U	12 U	12 U	11 U	12 U
Vinyl Chloride	12 U	12 U	12 U	12 U	11 U	12 U
Chloroethane	12 U	12 U	12 U	12 U	11 U	12 U
Methylene Chloride	26	25	19	110	25	24
Acetone	11 J	21 J	6 J	12 J	6 J	12 UJ
Carbon Disulfide	12 U	12 U	12 U	12 U	11 U	12 U
1,1-Dichloroethene	12 U	12 U	12 U	12 U	11 U	12 U
1,1-Dichloroethane	12 U	12 U	12 U	12 U	11 U	12 U
1,2-Dichloroethene (total)	12 U	12 U	12 U	12 U	11 U	12 U
Chloroform	12 U	12 U	12 U	12 U	11 U	12 U
1,2-Dichloroethane	12 U	12 U	12 U	12 U	11 U	12 U
2-Butanone	12 U	12 U	12 U	12 U	11 U	12 U
1,1,1-Trichloroethane	12 U	12 U	12 U	12 U	11 U	12 U
Carbon Tetrachloride	12 U	12 U	12 U	12 U	11 U	12 U
Bromodichloromethane	12 U	12 U	12 U	12 U	11 U	12 U
1,2-Dichloropropane	12 U	12 U	12 U	12 U	11 U	12 U
cis-1,3-Dichloropropene	12 U	12 U	12 U	12 U	11 U	12 U
Trichloroethene	12 U	12 U	12 U	12 U	11 U	10 J
Dibromochloromethane	12 U	12 U	12 U	12 U	11 U	12 U
1,1,2-Trichloroethane	12 U	12 U	12 U	12 U	11 U	12 U
Benzene	12 U	12 U	12 U	12 U	11 U	12 U
trans-1,3-Dichloropropene	12 U	12 U	12 U	12 U	11 U	12 U
Bromoform	12 U	12 U	12 U	12 U	11 U	12 U
4-Methyl-2-Pentanone	12 U	12 U	12 U	12 UJ	11 U	12 U
2-Hexanone	12 U	12 U	12 U	12 UJ	11 U	12 U
Tetrachloroethene	12 U	12 U	12 U	12 UJ	11 U	12 U
1,1,2,2-Tetrachloroethane	12 U	12 U	12 U	12 UJ	11 U	12 U
Toluene	14	6 J	12 U	12 UJ	35	12 U
Chlorobenzene	12 U	12 U	12 U	12 UJ	11 U	12 U
Ethylbenzene	12 U	12 U	12 U	12 UJ	11 U	12 U
Styrene	12 U	12 U	12 U	12 UJ	11 U	12 U
Xylene (total)	12 U	12 U	12 U	12 UJ	11 U	12 U
Total Number of TICs *	0	0	0	1	1	1

* Number, not concentrations, of tentatively identified compounds (TICs).

Soil-Vol

Semivolatile Organic Analysis for Surface Soil Samples
Remline (aka Model Industries)

Semivolatile Compound	Sample Location Concentrations in ug/kg					
	SS01 Background	SS02	SS03	SS04	SS05	SS06
Phenol	410 U	390 U	390 U	380 U	350 U	380 U
bis(2-Chloroethyl)Ether	410 U	390 U	390 U	380 U	350 U	380 U
2-Chlorophenol	410 U	390 U	390 U	380 U	350 U	380 U
1,3-Dichlorobenzene	410 U	390 U	390 U	380 U	350 U	380 U
1,4-Dichlorobenzene	410 U	390 U	390 U	380 U	350 U	380 U
1,2-Dichlorobenzene	410 U	390 U	390 U	380 U	350 U	380 U
2-Methylphenol	410 U	390 U	390 U	380 U	350 U	380 U
2,2'-oxybis(1-Chloropropane	410 U	390 U	390 U	380 U	350 U	380 U
4-Methylphenol	410 U	390 U	390 U	380 U	350 U	380 U
n-Nitroso-Di-n-Propylamine	410 U	390 U	390 U	380 U	350 U	380 U
Hexachloroethane	410 U	390 U	390 U	380 U	350 U	380 U
Nitrobenzene	410 U	390 U	390 U	380 U	350 U	380 U
Isophorone	410 U	390 U	390 U	380 U	350 U	380 U
2-Nitrophenol	410 U	390 U	390 U	380 U	350 U	380 U
2,4-Dimethylphenol	410 U	390 U	390 U	380 U	350 U	380 U
bis(2-Chloroethoxy)Methane	410 U	390 U	390 U	380 U	350 U	380 U
2,4-Dichlorophenol	410 U	390 U	390 U	380 U	350 U	380 U
1,2,4-Trichlorobenzene	410 U	390 U	390 U	380 U	350 U	380 U
Naphthalene	410 U	390 U	390 U	380 U	350 U	380 U
4-Chloroaniline	410 U	390 U	390 U	380 U	350 U	380 U
Hexachlorobutadiene	410 U	390 U	390 U	380 U	350 U	380 U
4-Chloro-3-Methylphenol	410 U	390 U	390 U	380 U	350 U	380 U
2-Methylnaphthalene	410 U	390 U	390 U	380 U	350 U	380 U
Hexachlorocyclopentadiene	410 UJ	390 UJ	390 UJ	380 UJ	350 UJ	380 UJ
2,4,6-Trichlorophenol	410 U	390 U	390 U	380 U	350 U	380 U
2,4,5-Trichlorophenol	990 U	950 U	950 U	930 U	850 U	930 U
2-Chloronaphthalene	410 U	390 U	390 U	380 U	350 U	380 U
2-Nitroaniline	990 U	950 U	950 U	930 U	850 U	930 U
Dimethyl Phthalate	410 U	390 U	390 U	380 U	350 U	380 U
Acenaphthylene	410 U	390 U	390 U	380 U	350 U	380 U
2,6-Dinitrotoluene	410 U	390 U	390 U	380 U	350 U	380 U
3-Nitroaniline	990 U	950 U	950 U	930 U	850 U	930 U
Acenaphthene	410 U	390 U	390 U	380 U	350 U	380 U
2,4-Dinitrophenol	990 U	950 U	950 U	930 U	850 U	930 U
4-Nitrophenol	990 U	950 U	950 U	930 U	850 U	930 U
Dibenzofuran	410 U	390 U	390 U	380 U	350 U	380 U
2,4-Dinitrotoluene	410 U	390 U	390 U	380 U	350 U	380 U
Diethylphthalate	410 U	390 U	390 U	380 U	350 U	380 U
4-Chlorophenyl-phenylether	410 U	390 U	390 U	380 U	350 U	380 U

Semivolatile Organic Analysis for Surface Soil Samples
Remline (aka Model Industries)

Semivolatile Compound	Sample Location Concentrations in ug/kg					
	SS01 Background	SS02	SS03	SS04	SS05	SS06
Fluorene	410 U	390 U	390 U	380 U	350 U	380 U
4-Nitroaniline	990 U	950 U	950 U	930 U	850 U	930 U
4,6-Dinitro-2-Methylphenol	990 U	950 U	950 U	930 U	850 U	930 U
n-Nitrosodiphenylamine	410 U	390 U	390 U	380 U	350 U	380 U
4-Bromophenyl-phenylether	410 U	390 U	390 U	380 U	350 U	380 U
Hexachlorobenzene	410 U	390 U	390 U	380 U	350 U	380 U
Pentachlorophenol	990 U	950 U	950 U	930 U	850 U	930 U
Phenanthrene	410 U	390 U	390 U	420	360	380 U
Anthracene	410 U	390 U	390 U	110 J	350 U	380 U
Carbazole	410 U	390 U	390 U	380 U	350 U	380 U
di-n-Butylphthalate	410 U	390 U	390 U	380 U	350 U	380 U
Fluoranthene	410 U	390 U	390 U	1400	720	380 U
Pyrene	410 U	390 U	390 U	1000	540 J	380 U
Butylbenzylphthalate	410 U	390 U	390 U	380 U	350 U	380 U
3,3'-Dichlorobenzidine	410 U	390 U	390 U	380 U	350 U	380 U
Benzo(a)Anthracene	410 U	390 U	390 U	500	200 J	380 U
Chrysene	410 U	390 U	390 U	610	330 J	380 U
bis(2-Ethylhexyl)Phthalate	410 U	390 UJB	390 UJB	380 UJB	350 U	380 UJB
di-n-Octyl Phthalate	410 U	390 U	390 U	380 U	350 U	380 U
Benzo(b)Fluoranthene	410 U	390 U	390 U	530	330 J	380 U
Benzo(k)Fluoranthene	410 U	390 U	390 U	490	290 J	380 U
Benzo(a)Pyrene	410 U	390 U	390 U	480	290 J	380 U
Indeno(1,2,3-cd)Pyrene	410 U	390 U	390 U	410	300 J	380 U
Dibenzo(a,h)Anthracene	410 U	390 U	390 U	380 U	350 U	380 U
Benzo(g,h,i)Perylene	410 U	390 U	390 U	120 J	160 J	380 U
Total Number of TICs*	21	22	22	23	9	21

* Number, not concentrations, of tentatively identified compounds (TICs).

soil-sv

Pesticide/PCB Analysis for Surface Soil Samples
Remline (aka Model Industries)

Pesticide/ PCB	Sample Location Concentrations in ug/kg					
	SS01 Background	SS02	SS03	SS04	SS05	SS06
Alpha-BHC	2.1 U	2.0 U	2.0 U	2.0 U	1.8 U	2.0 U
Beta-BHC	2.1 U	2.0 U	2.0 U	2.0 U	1.8 U	2.0 U
Delta-BHC	2.1 U	2.0 U	2.0 U	2.0 U	1.8 U	2.0 U
Gamma-BHC (Lindane)	2.1 U	2.0 U	2.0 U	2.0 U	1.8 U	2.0 U
Heptachlor	2.1 U	2.0 U	2.0 U	2.0 U	1.8 U	2.0 U
Aldrin	2.1 U	2.0 U	2.0 U	2.0 U	1.8 U	2.0 U
Heptachlor Epoxide	9.6 P	2.0 U	2.0 U	2.0 U	1.8 U	2.0 U
Endosulfan I	2.1 U	2.0 U	2.0 U	2.0 U	1.8 U	2.0 U
Dieldrin	4.1 U	3.9 U	3.9 U	3.8 U	3.5 U	3.8 U
4,4'-DDE	4.1 U	3.9 U	3.9 U	3.8 U	3.5 U	7.9
Endrin	4.1 U	3.9 U	3.9 U	3.8 U	3.5 U	3.8 U
Endosulfan II	4.1 U	3.9 U	3.9 U	3.8 U	3.5 U	3.8 U
4,4'-DDD	4.1 U	3.9 U	3.9 U	3.8 U	3.5 U	3.8 U
Endosulfan Sulfate	4.1 U	3.9 U	3.9 U	3.8 U	3.5 U	3.8 U
4,4'-DDT	4.1 U	3.9 U	3.9 U	3.8 U	3.5 U	8.5
Methoxychlor	21 U	20 U	20 U	20 U	18 U	47
Endrin Ketone	4.1 U	3.9 U	3.9 U	3.8 U	3.5 U	3.8 U
Endrin Aldehyde	6.3	3.9 U	3.9 U	6.3 P	3.5 U	3.8 U
Alpha-Chlordane	2.1 U	2.0 U	2.0 U	2.0 U	1.8 U	2.0 U
Gamma-Chlordane	2.1 U	2.0 U	2.0 U	2.0 U	1.8 U	2.0 U
Toxaphene	210 U	200 U	200 U	200 U	180 U	200 U
Aroclor-1016	41 U	39 U	39 U	38 U	35 U	38 U
Aroclor-1221	83 U	80 U	80 U	78 U	71 U	78 U
Aroclor-1232	41 U	39 U	39 U	38 U	35 U	38 U
Aroclor-1242	41 U	39 U	39 U	38 U	35 U	38 U
Aroclor-1248	41 U	39 U	39 U	38 U	35 U	38 U
Aroclor-1254	41 U	39 U	39 U	38 U	35 U	38 U
Aroclor-1260	41 U	39 U	39 U	38 U	35 U	38 U

Pestsoil

Inorganic Analysis for Surface Soil Samples
Remline (aka Model Industries)

Metals and Cyanide	Sample Location Concentrations in mg/kg					
	SS01 Background	SS02	SS03	SS04	SS05	SS06
Aluminum	9890 *	17300 *	17100 *	10000 *	3680 *	12000 *
Antimony	10.5 JN	12.0 JBN	15.0 JN	8.4 UJN	16.8 JN	11.9 JBN
Arsenic	5.3	8.9	7.5	7.3	5.5	4.7
Barium	196	212	210	132	39.4 B	150
Beryllium	0.88	1.2	1.1 B	0.87 B	0.51 U	0.78 B
Cadmium	0.67	0.65 U	0.65 U	0.64 U	0.58 U	0.64 U
Calcium	16300	5470	6860	39000	121000	10400
Chromium	15.5	35.0	39.9	16.8	13.7	18.6
Cobalt	10.8	15.1	15.4	13.4	5.2 B	7.4 B
Copper	18.7 J	29.8 J	22.8 J	23.7 J	20.0 J	17.6 J
Iron	17200	28500	25500	22300	13900	15500
Lead	28.1	234 JN	273 JN	10.5	30.7	17.5
Magnesium	6090	4980	5520	22000	66500	5910
Manganese	1130 J	1290 J	1330 J	1060 J	509 J	595 J
Mercury	0.06 U	0.06 U	0.06 U	0.06 U	0.05 U	0.06 U
Nickel	12.8	18.6	16.6	16.8	10.5	17.2
Potassium	1800	1630	1780	1460	464 U	1830
Selenium	0.34 JBNW	0.42 JBNW	0.49 JBNW	0.25 JBNW	2.1 UJN	0.26 JBNW
Silver	0.85 U	0.82 U	0.82 U	0.81 U	0.73 U	0.80 U
Sodium	78.7 UB	92.6 UB	91.2 UB	108 JB	169 JB	91.8 UB
Thallium	0.21 B	0.20 B	0.23 B	0.37 B	0.30 B	0.17 U
Vanadium	30.8	44.2	42.9	27.0	13.6	27.8
Zinc	76.4 JE	76.9 JE	73.4 JE	72.0 JE	55.0 JE	63.1 JE
Cyanide	0.06 U	0.06 U	0.06 U	0.06 U	0.05 U	0.06 U

ssmetals

Volatile Organic Analysis for Surface Soil Samples
Tentatively Identified Compounds
Remline (aka Model Industries)

Compound Name	Retention Time	Estimated Concentration (ug/kg)	
Sample SS04			
Unknown	2.52	6	J
Sample SS05			
Unknown	14.40	7	J
Sample SS06			
Ethane, 1,1,2-trichloro-1,2,	2.88	13	JN

ssv-tic

Semivolatile Organic Analysis for Surface Soil Samples
Tentatively Identified Compounds
Remline (aka Model Industries)

Compound Name	Retention Time	Estimated Concentration (ug/kg)	
Sample SS01 (Background)			
Aldol condensation	3.72	940	J
Unknown	12.37	31000	J
Unknown acid	12.55	1900	J
Unknown	12.88	2200	J
Unknown	13.07	1700	J
Unknown	13.33	1800	J
Unknown acid	13.93	1800	J
Unknown	16.10	1700	J
Unknown hydrocarbon	17.50	3000	J
Unknown hydrocarbon	18.35	340	J
Unknown acid	18.73	510	J
Unknown hydrocarbon	19.75	330	J
Unknown hydrocarbon	19.85	430	J
Unknown	20.22	810	J
Unknown hydrocarbon	20.80	330	J
Unknown	20.92	670	J
Unknown	21.35	980	J
Unknown hydrocarbon	21.98	310	J
Stigmast-4-en-3-one	22.27	470	JN
Unknown	22.55	610	J
Unknown	23.57	1100	J
Sample SS02			
Aldol condensation	3.70	1200	J
Aldol condensation	4.12	350	J
Unknown	12.43	1500	J
Unknown acid	12.50	1100	J
Unknown acid	13.88	650	J
Unknown	15.15	890	J
Unknown	15.85	790	J
Unknown hydrocarbon	17.50	1600	J
Unknown hydrocarbon	18.08	220	J
Unknown	18.35	270	J
Phosphonic acid, dioctadecyl	18.73	380	JN
Pentatriacontane	19.75	280	JN
Unknown	19.90	360	J
Unknown	20.22	890	J
Unknown hydrocarbon	20.78	340	J
Unknown	20.92	500	J
Unknown	21.08	270	J
Unknown	21.20	230	J
Unknown	21.35	1300	J
Unknown	22.27	1000	J
Unknown	23.55	550	J
Unknown	25.20	510	J

Semivolatile Organic Analysis for Surface Soil Samples
Tentatively Identified Compounds (Continued)
Remline (aka Model Industries)

Compound Name	Retention Time	Estimated Concentration (ug/kg)
Sample SS03		
Aldol condensation	3.68	920 J
Aldol condensation	4.12	190 J
Unknown acid	12.45	3100 J
Unknown acid	13.88	1400 J
Unknown	15.15	560 J
Unknown	15.85	690 J
Unknown hydrocarbon	17.50	800 J
Unknown	18.35	230 J
Unknown hydrocarbon	18.67	220 J
Unknown hydrocarbon	18.72	340 J
Unknown hydrocarbon	19.75	350 J
Unknown	19.82	310 J
Unknown	20.12	680 J
Unknown hydrocarbon	20.78	350 J
Unknown PAH	20.90	440 J
Unknown PAH	21.08	550 J
Unknown	21.18	220 J
Unknown	21.33	1200 J
Unknown	22.25	550 J
Unknown	22.55	500 J
Unknown	23.53	780 J
Unknown	26.55	370 J
Sample SS04		
Aldol condensation	2.32	3000 J
Aldol condensation	3.73	1300 J
Aldol condensation	4.13	390 J
Unknown acid	11.43	490 J
Hexadecanoic acid	12.53	2800 JN
Unknown	12.83	1000 J
Unknown acid	13.92	530 J
Unknown PAH	14.80	900 J
Unknown	16.12	690 J
Unknown hydrocarbon	17.52	1600 J
Unknown PAH	17.82	480 J
Unknown hydrocarbon	18.67	150 J
Unknown	18.73	250 J
Unknown hydrocarbon	19.75	220 J
Unknown	19.83	1000 J
Unknown hydrocarbon	20.78	230 J
Unknown	20.92	650 J
Unknown	21.35	940 J
Unknown	21.98	270 J
Stigmast-4-en-3-one	22.28	370 JN
Unknown	22.57	470 J
Unknown PAH	23.27	210 J
Unknown	23.57	910 J

Semivolatile Organic Analysis for Surface Soil Samples
Tentatively Identified Compounds (Continued)
Remline (aka Model Industries)

Compound Name	Retention Time	Estimated Concentration (ug/kg)
Sample SS05		
Aldol condensation	3.72	1200 J
Aldol condensation	4.12	390 J
Unknown acid	10.80	170 J
Unknown	11.87	350 J
Unknown	12.45	970 J
Unknown acid	12.50	560 J
Unknown	20.23	920 J
Unknown PAH	22.30	79 J
Unknown	22.65	100 J
Sample SS06		
Aldol condensation	3.72	1200 J
Unknown acid	12.50	1100 J
Unknown acid	13.88	600 J
Unknown acid	14.00	460 J
Unknown	15.43	600 J
Unknown	17.13	480 J
Unknown hydrocarbon	17.50	1300 J
Unknown	18.35	470 J
Unknown hydrocarbon	18.73	570 J
Unknown hydrocarbon	19.47	360 J
Pentatriacontane	19.75	330 JN
Unknown hydrocarbon	19.83	1400 J
Unknown hydrocarbon	20.78	380 J
Unknown PAH	20.92	450 J
Unknown PAH	21.07	570 J
Unknown	21.35	1200 J
Unknown	22.25	1500 J
Unknown	23.45	290 J
Unknown	23.85	920 J
Unknown	26.00	670 J
Unknown	27.90	430 J

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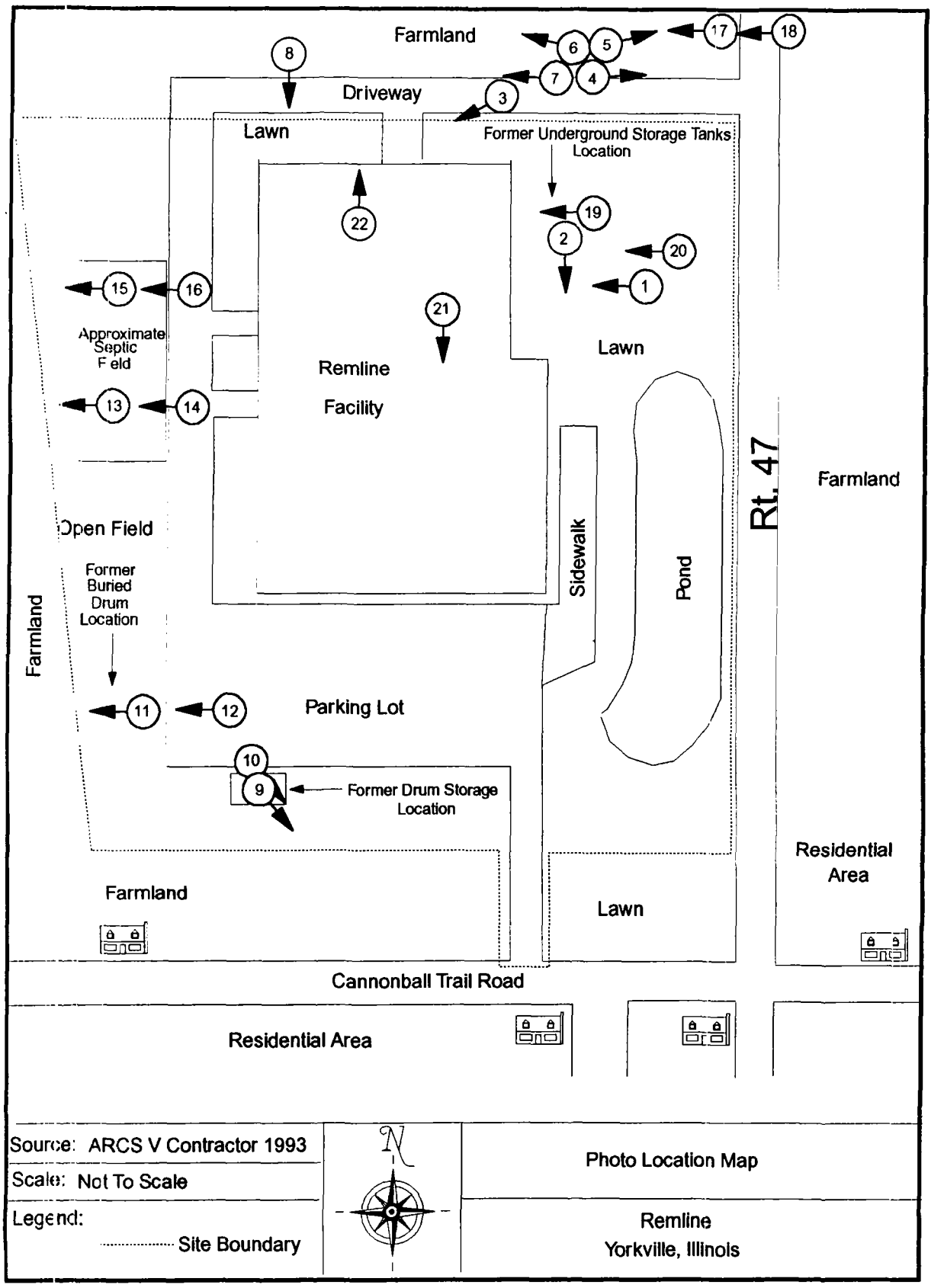
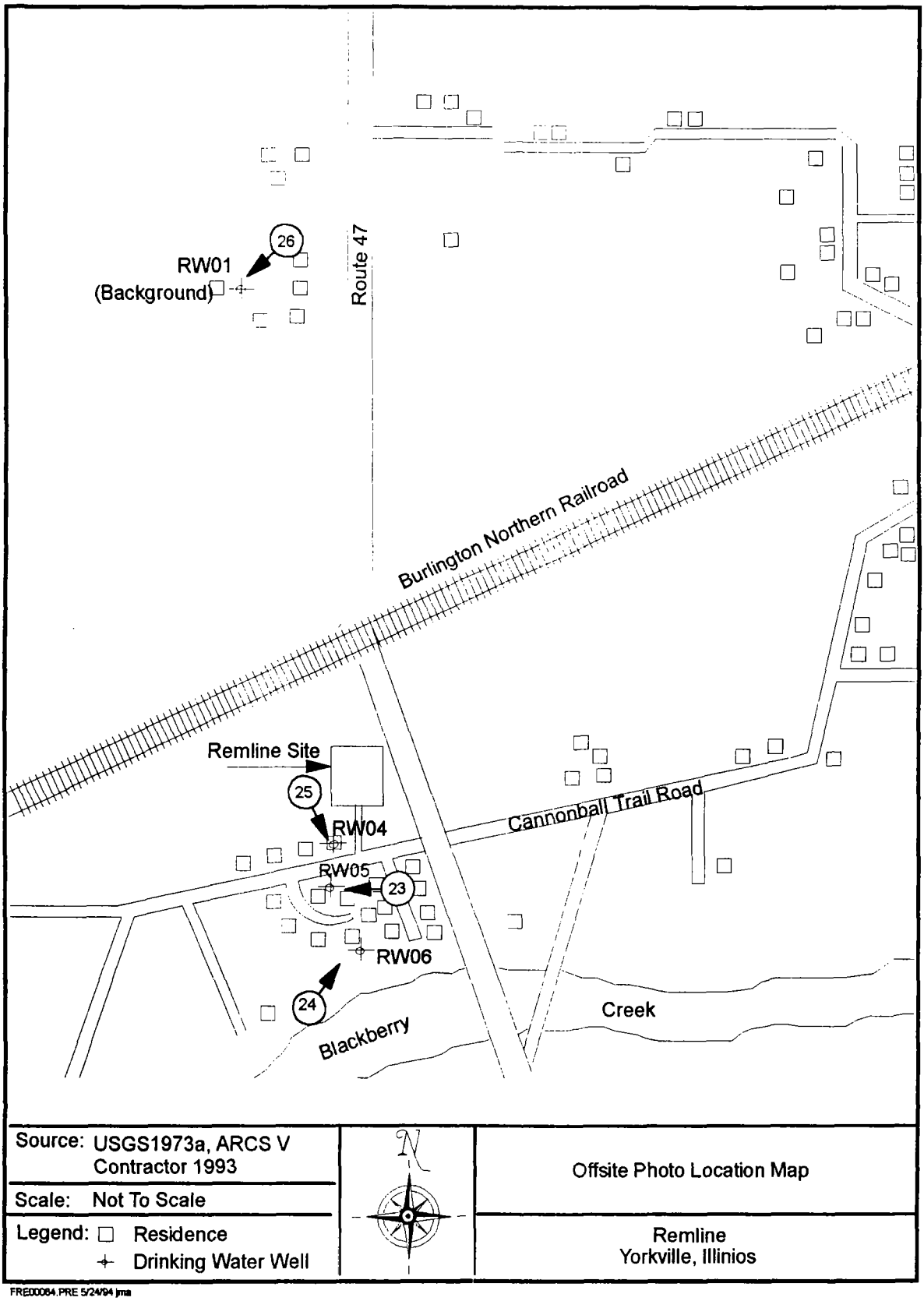
Appendix E

Remline (a.k.a. Model Industries)

Site Photographs



FREC0C65.PRE 6/13/94 jma


RW01
(Background)
26
Route 47
Burlington Northern Railroad
Remline Site
25
RW04
RW05
23
RW06
24
Cannonball Trail Road
Blackberry
Creek
Source: USGS1973a, ARCS V Contractor 1993
Scale: Not To Scale
Legend: Residence
Drinking Water Well
N
Offsite Photo Location Map
Remline
Yorkville, Illinios
FRE00084.PRE 5/24/94 jma

Date: 06/17/93

Time: 1105

Photo Taken By: J. Quinn

Photo Number: 1

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Gravel at former UST location.

Date: 06/17/93

Time: 1107

Photo Taken By: J. Quinn

Photo Number: 2

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: South

Description: Sewage ejector system.

Date: 06/17/93

Time: 1110

Photo Taken By: J. Quinn

Photo Number: 3

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: Southwest

Description: Loading dock on north side of Remline facility.

Date: 06/17/93

Time: 1113

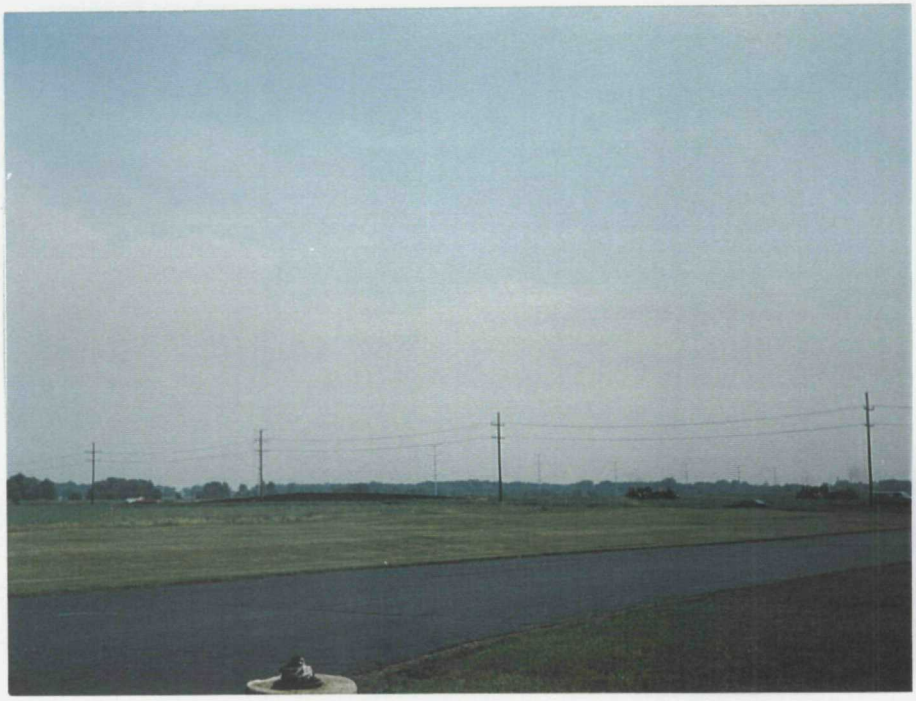
Photo Taken By: J. Quinn

Photo Number: 4

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: East

Description: Farmed field north of Remline.



Date: 06/17/93

Time: 1113

Photo Taken By: J. Quinn

Photo Number: 5

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: Northeast

Description: Farmed field north of Remline.

Date: 06/17/93

Time: 1113

Photo Taken By: J. Quinn

Photo Number: 6

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: Northwest

Description: Farmed field north of Remline.

Date: 06/17/93

Time: 1113

Photo Taken By: J. Quinn

Photo Number: 7

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Farmed field north of Remline.

Date: 06/17/93

Time: 1115

Photo Taken By: J. Quinn

Photo Number: 8

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: South

Description: Northern well.

Date: 11/02/93

Time: 0905

Photo Taken By: J. Albano

Photo Number: 9

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: Southeast

Description: Soil sample location SS05.

Date: 11/02/93

Time: 0905

Photo Taken By: J. Albano

Photo Number: 10

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: Southeast

Description: Expanded view of soil sample location SS05.

Date: 11/02/93

Time: 0928

Photo Taken By: J. Albano

Photo Number: 11

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Soil sample location SS04.

Date: 11/02/93

Time: 0928

Photo Taken By: J. Albano

Photo Number: 12

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Expanded view of soil sample location SS04.

Date: 11/02/93

Time: 0935

Photo Taken By: J. Albano

Photo Number: 13

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Soil sample location SS03.

Date: 11/02/93

Time: 0935

Photo Taken By: J. Albano

Photo Number: 14

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Expanded view of soil sample location SS03.

Date: 11/02/93

Time: 0955

Photo Taken By: J. Albano

Photo Number: *15*

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Soil sample location SS02.

Date: 11/02/93

Time: 0955

Photo Taken By: J. Albano

Photo Number: 16

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Expanded view of soil sample location SS02.

Date: 11/02/93

Time: 1003

Photo Taken By: J. Albano

Photo Number: 17

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Soil sample location SS01; background sample.

Date: 11/02/93

Time: 1003

Photo Taken By: J. Albano

Photo Number: 18

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Expanded view of soil sample location SS01.

Date: 11/02/93

Time: 1030

Photo Taken By: J. Albano

Photo Number: 19

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Soil sample location SS06.

Date: 11/02/93

Time: 1030

Photo Taken By: J. Albano

Photo Number: 20

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Expanded view of soil sample location SS06.

Date: 11/02/93

Time: 1108

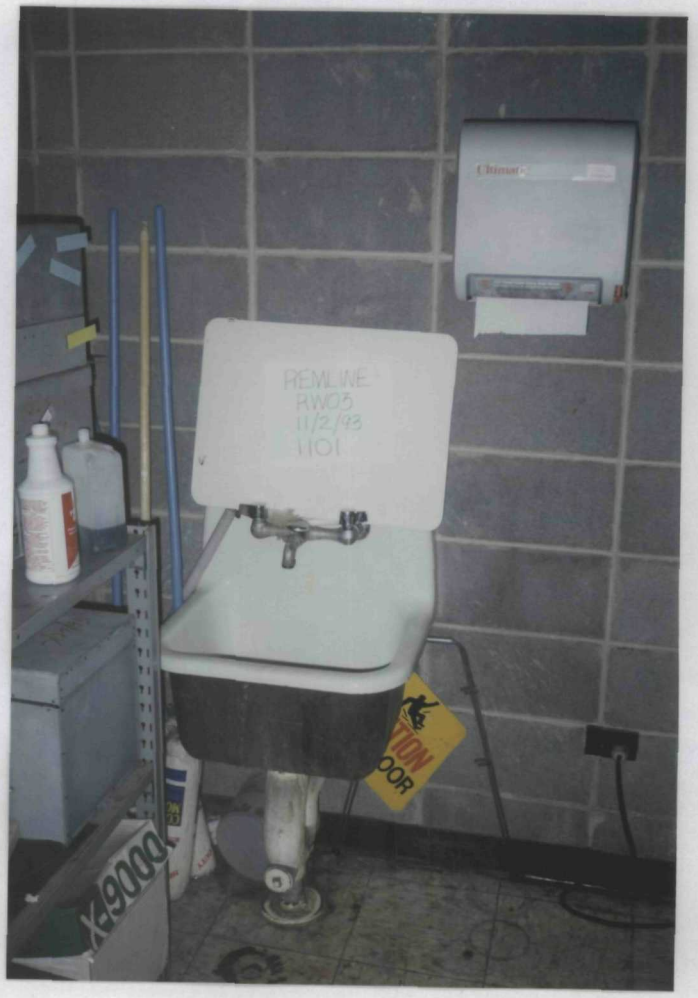
Photo Taken By: J. Albano

Photo Number: 21

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: South

Description: Drinking/production well sample location RW03.



Date: 11/02/93

Time: 1131

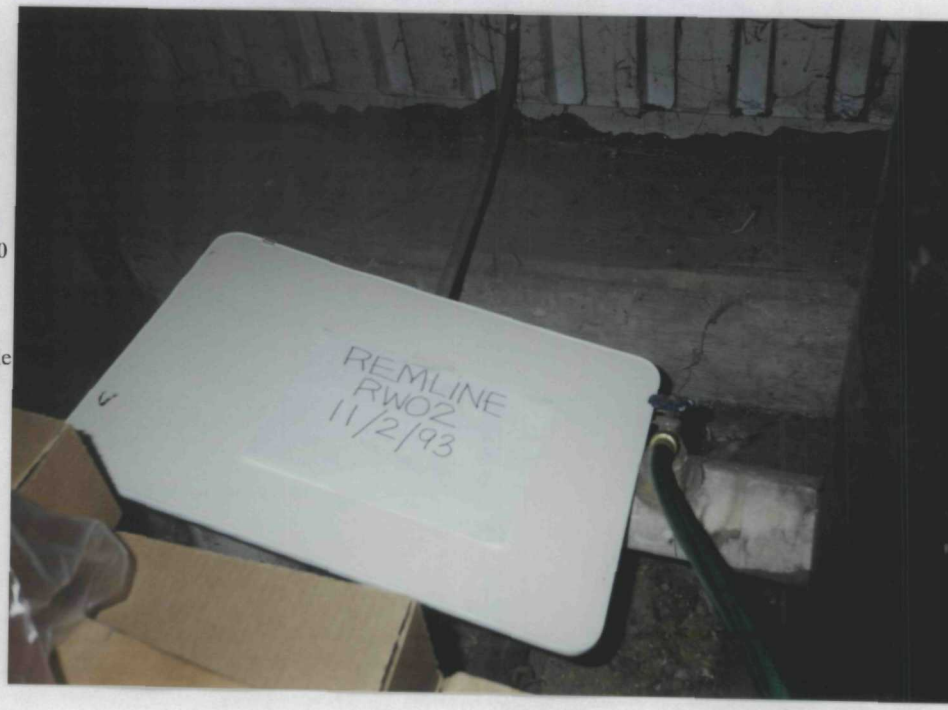
Photo Taken By: J. Albano

Photo Number: 22

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: North

Description: Drinking/production well sample location RW02.



Date: 11/02/93

Time: 1420

Photo Taken By: J. Albano

Photo Number: 23

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: West

Description: Residential well sample location RW05.

Date: 11/02/93

Time: 1500

Photo Taken By: J. Albano

Photo Number: 24

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: Northwest

Description: Residential well sample location RW06.

Date: 11/02/93

Time: 1620

Photo Taken By: J. Albano

Photo Number: 25

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: Southeast

Description: Residential well sample location RW04.

Date: 11/02/93

Time: 1720

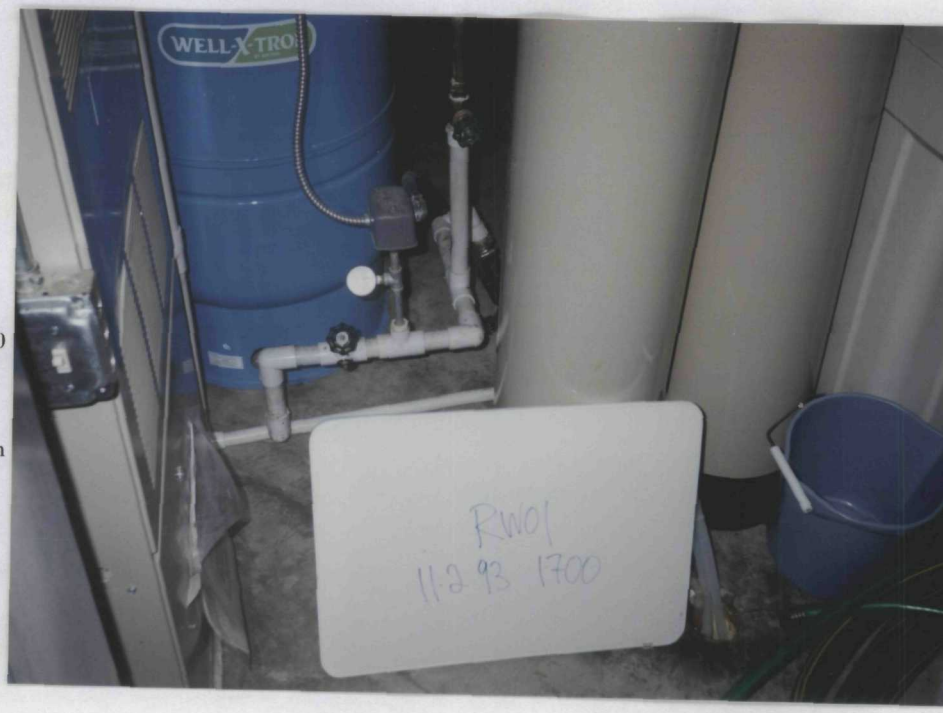
Photo Taken By: J. Albano

Photo Number: 26

Location/ILD #: Remline / ILD 005 112 420

Direction of Photo: Southwest

Description: Residential well sample location RW01.



Date: 11-02-93

Time: 1730

Photo Taken By: J. Albano

Photo Number: 27

Location/ILD #: Yorkville, IL ILD003112420

Direction of Photo: South

Description: Sealed soil sample coolers.

Date: 11-03-93

Time: 1045

Photo Taken By: J. Albano

Photo Number: 28

Location/ILD #: Yorkville, IL ILD003112420

Direction of Photo: West

Description: Sealed residential well sample coolers.